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FOREIGN AND BRITISH BIRDS

IN FREEDOM AND CAPTIVITY.

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DAVID SETH-SMITH, F.Z.S., M.B.O.U.

—AND—

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ERRATA.

Owing to an unfortunate oversight the numbering of pp. 269 and 270 has been duplicated; readers are therefore requested to mark the first two pages of the article on "The White-bellied Amethyst Starling" 269* and 270*.

Alter from "male" to "female":—

Page 207, lines 21, 30, and 33.

„ 208, „ 2, 2, 6, and 10.

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REPORT OF THE COUNCIL

FOR THE YEAR 1907-8.

Once more we have come to the close of our Society's year and to the completion of another volume of our Magazine, and we think that our members may congratulate themselves that Volume VI. of the New Series is equal to any of its predecessors. Many articles of great interest and value have appeared, and we are glad to notice amongst the contributors several who have not previously written for our journal.

Seven coloured plates by Mr. HERBERT GOODCHILD, and numerous black and white plates and text figures have been published, the illustrations being on the whole quite equal, if not superior, to those which have previously appeared in this journal.

In the pages of the present volume mention is made of many species of birds which have been imported alive for the first time this year; and accounts are published of the breeding in captivity of several species which had not previously been known to rear young in the United Kingdom.

We are glad to be able to report that the Society is in a sound and prosperous condition, and that the membership continues to increase in a very satisfactory manner.

Our best thanks are due to those members who, by their contributions to our pages or in other ways, have helped to make the present volume a success. Especially we are indebted to Dr. A. G. BUTLER for very kindly undertaking the Editorship, in addition to his duties as Honorary Correspondence Secretary, during the absence from England of Mr. SETH-SMITH.

Signed for the Council,

T. H. NEWMAN, *Hon. Business Secretary.*

D. SETH-SMITH, *Hon. Editor.*

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THE JOURNAL OF THE AVICULTURAL SOCIETY.

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- BLATHWAYT, The Rev. FRANCIS LINLEY, M.A., M.B.O.U.; 1, Stonefield Avenue, Lincoln. (Jan., 1902).
- BLATHWAYT, F. W.; Pellham House, West Folkestone. (Feb., 1907).
- BONNOTE, JOHN LEWIS, M.A., F.L.S., F.Z.S., M.B.O.U.; Gadespring Lodge, Hemel Hempstead, Herts; and 113, Blenheim Crescent, Notting Hill, W. (Dec., 1894).
- BOOTH, H. B., M.B.O.U.; 40, Spring Royd, Shipley, Yorks. (March, 1906).
- BOOTHROYD, ALFRED E.; Lord Street, Southport. (Sept., 1901).
- BOUGHTON-LEIGH HENRY; Brownsover Hall, Rugby. (May, 1900).
- BOUSKILL, GKO. E.; Romanhurst, Bramall Lane, Stockport. (April, 1896).
- BOWEN, JOHN, J.P., F.Z.S.; East Hill House, Herne Bay. (Oct., 1900).

- BOWIE, Miss HELEN; Queen's Parade, Clifton Hill, Melbourne, Victoria. (Nov., 1903).
- 50 BOX, E. A. GRANVILLE; 28, Garfield Road, Lavender Hill, S.W. (Nov., 1907).
- BOYD, HAROLD; Barton House, Didsbury, Manchester. (March, 1902).
- BOYKS, FREDERICK; Beverley, Yorkshire. (Sept., 1907).
- BRADSHAW-ISHERWOOD, Mrs.; Maidstone Road, Headcorn. (June, 1892; dormant).
- BRAMPTON, Miss E.; 8, Chesterford Gardens, Frogual, Hampstead, N.W. (Feb., 1898).
- BREISFORD, JOHN; 75, Wellington Road North, Stockport. (Oct., 1902).
- BRIDGEMAN, Lieut. The Hon. RICHARD, O.B., R.N., M.B.O.U.; Weston Park, Shifnal, Salop. (Dec., 1904).
- BRIDGEMAN, Colonel, The Hon. FRANCIS C.; Neachley, Shifnal. (Oct., 1905).
- BROMET, Mrs. HENRY; Highfield, Tadcaster. (Oct., 1903).
- BROOK, E. J.; Hoddon Castle, Ecclefechan, N.B. (August, 1905).
- 60 BROTHKSTON, G. M.; 18, St. John Street, Edinburgh. (Feb., 1895; dormant 1901-5).
- BROWNING, WILLIAM H.; 18, West 54th Street, New York City. (March, 1906).
- BUBB, Miss; Ullenwood, near Cheltenham. (June, 1904).
- BULKLEY, The Lady MAGDALEN WILLIAMS; 24A, Portland Place, W. (Nov., 1906).
- BURCK, SAMUEL; Ivy Cottage, Fairford. (November, 1896).
- BURKISS, H. W.; Mole Villa, Belmont Road, Leatherhead, Surrey. (Nov., 1900).
- BURNETT-STUART, GEORGE E.; Ministry of Finance, Cairo. (Dec., 1906).
- BURTON, WALTER; Moorefort, East Sheen, Mortlake, S.W. (Dec. 1901).
- BUTLER, ARTHUR G., Ph.D., F.L.S., F.Z.S., M.B.O.U. (*Hon. Correspondence Secretary*); 124, Beckenham Road, Beckenham, Kent. (Orig. Mem.)*
- BUTLER, A. L., F.Z.S., M.B.O.U.; Superintendent of Game Preservation, Khartoum, Soudan. (Aug., 1906).
- 70 BUTLER, ARTHUR LARCHIN, M. Aust. O. U.; Waimarie, Lower Sandy Bay, Hobart, Tasmania. (July, 1905).
- BUTLER, Colonel SOMERSET J.; Kilnurry, Thomastown, co. Kilkenny. (June, 1904).
- BÜTTIKOFER, Dr. J., C.M.Z.S., M.B.O.U.; Director of the Zoological Gardens, Rotterdam, Holland. (Oct., 1907). (*Hon. Member*).
- CAMPBELL, The Hon. IAN, M.; Stockpole, Pembroke. (Dec., 1905).
- CAMPS, H. T. T., F.Z.S.; Linden House, Haddenham, Isle of Ely. (Orig. Mem.)*
- CAPERN, F., 53, Redland Road, Bristol. (March, 1903).
- CARLYON, Mrs.; The Rise, Brockenhurst, Hants. (Dec., 1900).
- CARPENTER, The Hon. Mrs.; 22, Grosvenor Road, S.W. (Feb., 1898).

- CARRICK, GEORGE; 13, King's Terrace, Maryhill, Glasgow. (March, 1898).
- CASTELLAN, VICTOR E.; Hare Hall, Romford, Essex. (Orig. Mem.)
- 80 CASTELL, Mrs. G. B.; Fleetwood Cottage, Rye, Sussex, and Villa Stella, via Montebello, Rapallo, Riviera di Levante. (Dec., 1906).
- CASTLE-SLOANE, C., F.Z.S.; Oat Hall, near Crawley, Sussex. (March, 1900).
- CATTLE, C. F.; Thurston, Bury St. Edmunds. (Jan., 1905).
- CECIL, The Lady WILLIAM; Hunmanby Hall, Filey, Yorkshire. (Feb., 1901).
- CHAPMAN, P. GODFREY; 21, Lennox Gardens, S.W. (Oct., 1898).
- CHARRINGTON, Mrs. C.; Frensham Hill, Farnham, Surrey. (Jan., 1907).
- CHARRINGTON, Mrs. MOWBRAY; How Green, Hever, Edenbridge, Kent. (May, 1896).
- CHATWIN, HERBERT F.; 23, King Street, Nottingham. (Jan., 1902).
- CHAWNER, Miss; Forest Bank, Lyndhurst, Hants. (July, 1899).
- CLITHEROW, Mrs. CLAUD TRACEY; 20, Park Square, Regent's Park, N.W. (June, 1903).
- 90 CLOSE, Mrs. M. FARNHAM; 17, The Causeway, Horsham. (Feb., 1906).
- COCKELL, NORMAN FORBES; 21, Camac Street, Calcutta, India. (Nov., 1905).
- CONNELL, Mrs. KNATCHBULL; The Orchard, Brockenhurst, Hants. (Nov., 1897).
- CONSTABLE, The Rev. W. J.; Uppingham School, Uppingham. (Sept., 1901; dormant 1905-6).
- CONYNGHAM, The Dowager Marchioness; 36, Belgrave Square, S.W. (Jan., 1900).
- COOKSON, KENNETH; Oakwood, Wylam, R. S. O., Northumberland. (Nov., 1906).
- COOPER, JAMES; Killerby Hall, Scarborough. (Orig. Mem.)
- COOPER, WILLIAM; Aislaby Hall, Pickering, Yorks. (March, 1907).
- CORBET, Lady NINA; Acton Reynald, Shrewsbury. (Oct., 1905).
- CORY, REGINALD R.; Duffryn, near Cardiff. (August, 1905).
- 100 COXWELL-ROGERS, Miss; Park Gate, Cheltenham. (Dec., 1895).
- CRESSWELL, O. ERNST, M.A., J.P.; Morney Cross, near Hereford. (Orig. Mem.)
- CRESSWELL, WILLIAM GEORGE, M.D., F.Z.S.; Eden Lodge, Kingston-on-Thames. (June, 1900).
- CROFT, A. B.; The Clock House, Ashford, Middlesex. (May, 1907).
- CRONKSHAW, J.; 218, Burnley Road, Accrington. (Dec., 1894).
- CROWFOOT, Miss ELLEN M.; Blyburgate House, Beccles. (Sept., 1904).
- CUMMINGS, A.; 16, Promenade Villas, Cheltenham. (Dec. 1896).
- CURREY, Mrs.; The Pit House, Ewell, Surrey. (Feb., 1906).
- CUSHNY, CHARLES; The Bath Club, 34, Dover Street, Piccadilly, W. (June, 1906).
- DAIGLIESH, GORDON; Brook Witley, near Godalming, Surrey. (Oct., 1906).

- 110 DART, HENRY; 42, Broomfield Road, Tolworth, near Surbiton. (May, 1903).
DAVIES, AMOS; Tour House, Audenshaw, near Manchester. (Jan., 1906).
DAWNAY, The Lady ADELAIDE; Brampton House, Northampton. (July, 1903).
DELL, CHARLES; 12, High Street, Harlesden, N.W. (July, 1900).
DE MANCHA, JOSE M.; 1, Gledhowe Gardens, Earl's Court, S.W. (Oct., 1902).
DENNIS, Mrs. H. E.; The Beeches, Fay Gate, Sussex. (March, 1903).
DENT, Mrs.; Curraghmore, Cavendish Road, Bournemouth. (Mar., 1907).
DE TAINTIGNIES, La Baronne, Le Clément; Cleveland, Minehead, Somerset. (Feb., 1902).
D'EVELYN, Dr. FREDERICK W., Pres. G. S. Cal., etc. etc.; 2103, Clinton Avenue, Alameda, California, U.S.A. (June, 1906).
DEWAR, D., I.C.S.; Lahore, India. (Sept., 1905).
120 DEWING, Miss; Rougham House, Bury St. Edmunds. (Sept., 1906).
DE WINTON, WILLIAM EDWARD, F.Z.S., M.B.O.U.; Oriulton, Pembroke. (August, 1903).
DONALD, C. H.; c/o Punjab Banking Company, Ltd., Lahore, India. (March, 1906).
DOUGLAS, Miss; Rose Mount, Pitlochry, N.B. (June, 1905).
DOUGLAS, WILLIAM C., F.Z.S.; 9, Trebovir Road, Earl's Court, S.W. (Nov., 1900).
DREWITT, FREDERICK DAWTREY, M.A., M.D., F.R.C.P., F.Z.S., M.B.O.U.; 14, Palace Gardens Terrace, Kensington, W. (May, 1903).
DRUMMOND, HAY, Colonel R; 2nd Coldstream Guards; Seggieden-by-Perth. (July, 1907).
DRUMMOND, Miss; Mains of Megginch, Errol, N.B. (Feb., 1905).
DUFF, The Lady GRANT; 11, Chelsea Embankment, S.W. (Aug., 1905).
DUNLEATH, The Lady; Ballywalter Park, Ballywalter, co. Down, Ireland. (August, 1897).
130 DUNSANY, The Lady; Dunstall Priory, Shoreham-by-Sevenoaks, Kent. (Feb., 1902).
DUTTON, The Hon. and Rev. Canon; Bibury, Fairford. (Orig. Mem.)

EDWARDS, G.; 377, Coldharbour Lane, Brixton, S.W. (August, 1902).
EDWARDS, STANLEY, B.A., F.Z.S.; c/o E. B. Trotter, Esq., 64, Victoria Street, Westminster, S.W. (Sept., 1906).
EZRA, DAVID; 59, Ezra Street, Calcutta. (June, 1902).

FANSHAW, Capt. R. D.; Adbury Holt, Newbury, Berks. (Aug., 1907).
FARMBOROUGH, PERCY W., F.Z.S.; Lower Edmonton. (June, 1896).
FARRAR, The Rev. C. D.; Micklefield Vicarage, Leeds. (Jan., 1895).
FASEY, WILLIAM R.; The Oaks, Holly Bush Hill, Snaresbrook, N.E. (May, 1902).
FEILDING, The Lady LOUISA; Broome Park, Betchworth, Surrey. (July, 1902).

- 140 **FIELD, GEORGE**; Sorrento, Staplehurst, Kent. (March, 1900).
FILLMER, HORATIO R.; Brendon, Harrington Road, Brighton. (Dec., 1903).
FINN, FRANK, B.A., F.Z.S., M.B.O.U.; 29, Chalcot Crescent, Primrose Hill, London, N.W. (March, 1895).
FLOWER, Capt. STANLEY S., F.Z.S., M.B.O.U.; Director, Egyptian Government Zoological Gardens; Ghizeli (Giza), Cairo. (Jan., 1903).
FOLLETT, The Lady JULIA; Woodside, Old Windsor. (Oct., 1903).
FORTUNE, RILEY, F.Z.S.; Lindesfarne, Dragon Road, Harrogate. (Nov., 1906).
FOSTER, WM. HILL; 164, Portland Street, Southport. Jan., 1902).
FOTHERGILL, Major HENRY, J.P.; Copt Hall, Hawkhurst. (April, 1900).
FOWLER, CHARLES; 26, Broad Street, Blaenavon. (Dec., 1894).
GALLOWAY, P. F. M.; Durban, St. Peter's Avenue, Caversham, Reading. (March, 1907).
150 **GIBBS, Mrs. H. MARTIN**; Barrow Court, Flax Bourton, R.S.O., Somerset. (April, 1904).
GIBBINS, WILLIAM B.; Ettington, near Stratford-on-Avon. (June, 1895).
GILES, HENRY M., M. Aust. O. U. (Orig. Mem.); Zoological Gardens, Perth, Western Australia. (June, 1903).
GILL, ARTHUR, M.R.C.V.S.; Veterinary Establishment, Bexley Heath, Kent. (Dec., 1899).
GILROY, NORMAN, M.B.O.U.; 95, Claremont Road, Forest Gate, E. (July, 1906).
GLADSTONE, Miss J.; The Lodge, Parkstone, Dorset. (July, 1905).
GODDARD, H. E.; Rothsay, Thicket Road, Sutton, Surrey. (Feb., 1899).
GODMAN, F. DUCANE, D.C.L., F.R.S., F.Z.S., President of the British Ornithologists' Union; 45, Pont Street, S.W. (Oct., 1904). (*Honorary Member*).
GOODALL, J. M.; 52, Oxford Gardens, N. Kensington, London, W. (July, 1905).
GOODCHILD, HERBERT, M.B.O.U.; 66, Gloucester Road, Regent's Park, N.W. (Oct., 1902).
160 **GOODFELLOW, WALTER, M.B.O.U.**; Montrose, New Park Road, West Southbourne, Hants. (June, 1897).
GORTER, Madame; The Delta, Walmer, Kent. (Nov., 1901).
GOW, J. BARNETT; 21, West Nile Street, Glasgow, and Ledcameroch, Bearsden, Glasgow. (Feb., 1906).
GRABOWSKY, F., Director of the Zoological Gardens; Breslau, Germany. (June, 1905).
GRAY, HENRY, M.R.C.V.S.; 23, Upper Phillimore Place, W. (June, 1906).
GREGORY, AUBREY; Gopalichuck, Jherriali, E.I.R., India. (Nov., 1902).
GREGORY, Mrs.; Melville, Parkstone, Dorset. (Dec., 1901).
GRIFFITHS, M. E.; 4, Temple Road, Stowmarket. (May, 1902).
GRISCOM, LUDLOW; 21, Washington Square North, New York City, U.S.A. (April, 1905).

- GRÖNVOLD, HENRIK ; 26, Albert Bridge Road, Battersea Park, S.W. (Nov., 1902).
- 170 GUILFORD, Miss H. ; 23, Lenton Avenue, The Park, Nottingham. (March, 1903).
- GÜNNING, Dr. J. W. B., F.Z.S., Director of the Transvaal Museum and Zoological Gardens ; Pretoria, South Africa. (Sept., 1906).
- GÜNTHER, ALBERT, M.A., M.D., Ph.D., F.R.S., F.Z.S., M.B.O.U. ; 2, Lichfield Road, Kew Gardens. (Sept., 1902). (*Honorary Member*).
- GUNTHER, ROBERT L. ; Park Wood, Englefield Green, Surrey. (August, 1904).
- GURNKY, JOHN HENRY, F.Z.S., M.B.O.U. ; Keswick Hall, Norwich : and Athenæum Club, Pall Mall, S.W. (Dec., 1904).
- HAAGNER, A. K., F.Z.S., M.B.O.U., Hon. Sec. S. African Ornithological Union ; Dynamite Factory, Modderfontein, Transvaal. (Nov., 1905).
- HAMILTON, Madame ; Les Deux Parzes, Champéry, (Valaise), Switzerland. (Nov., 1902).
- HAMILTON, Miss ; 2, Upper Wimpole Street, W. (April, 1902).
- HARDING, W. A., F.Z.S. ; Histon Manor, Cambridge. (Dec., 1903).
- HARDING, W. ; The Duke of Edinburgh Hotel, 85 & 87, Kingston Road, Wimbledon. (August, 1905).
- 180 HARDY, LAWRENCE, M. P. ; Sandling Park, Hythe, Kent. (Nov., 1906).
- HARKWOOD, The Countess of ; Harewood House, Leeds. (March, 1903).
- HARPER, Miss ; 55, Waterloo Road, Bedford. (March, 1902).
- HARPER, EDWARD WILLIAM, F.Z.S., M.B.O.U. ; 55, Waterloo Road, Bedford. (Feb., 1901).
- HARRISON, J. H. ; 18, East Beach, Lytham. (Sept., 1906).
- HARTLEY, Mrs. ; St. Helen's Lodge, Hastings. (April, 1897).
- HARVEY, The Hon. Lady ; Langley Park, Slough. (Oct., 1906).
- HAWKE, The Hon. MARY C. ; Wighill Park, Tadcaster. (Nov., 1900).
- HAWKINS, L. W. ; Estrilda, 206, Clive Road, West Dulwich, S.E. (Jan., 1899).
- HAZLERIGG, Sir ARTHUR ; Noseley Hall, Leicester. (Mar., 1907).
- 190 HEMSWORTH, The Rev. B., M.A., J.P. ; Monk Fryston Hall, South Milford, Yorks. (June, 1901).
- HEWITT, H. C. ; Hope End, Ledbury, Herefordshire. (Jan., 1905).
- HILL, Mrs. E. STAVELKY ; Oxley Manor, Wolverhampton. (Oct., 1905).
- HINCKES, R. T. ; Foxley, Hereford. (Feb., 1899).
- HINDLE, R. FRANKLIN ; 34, Brunswick Road, Liverpool. (Sept., 1898).
- HOBSON, F. G. ; Villa Delta, Beverley. (May, 1905).
- HOCKEN, Dr. ; Dunedin, New Zealand. (Jan., 1904).
- HODGSON, The Hon. Mrs. ; Clopton, Stratford-on-Avon. (March, 1903).
- HODGSON, RICHARD, Jun. ; Molescroft, Beverley. (Feb., 1903).
- HOLDEN, Ralph A. ; 5, John Street, Bedford Row, London. (May, 1906).
- 200 HOLT, EARDLEY-WILMOT BLOMFIELD, F.L.S., F.Z.S. ; Ashurstwood House, East Grinstead. (Dec., 1904).
- HOPKINSON, EMILIUS, D.S.O., M.A., M.B. Oxon. ; 45, Sussex Square, Brighton, and Bathurst, Gambia, West Africa. (October, 1906).

- HOPSON, FRED C.; Northbrook Street, Newbury. (March, 1897).
- HORSBRUGH, Capt. BOYD R., A.S.C.; Cantonments, Potchefstroom, Transvaal, S. Africa. (Jan., 1898).
- HORSBRUGH, C. B.; 7, Kensington, Bath. (June, 1905).
- HORTON, LEONARD W.; Hill House, Compton, Wolverhampton. (Feb., 1902).
- HOUSDEN, JAMES B.; Brooklyn, Cator Road, Sydenham, S.E. (Orig. Mem.).
- HOWARD, ROBERT JAMES, M.B.O.U.; Shear Bank, Blackburn. (April, 1903).
- HOWARD-VYSE, H.; Stoke Place, Slough. (Nov., 1906).
- HOWMAN, Miss; Sherwood, 6, Essex Grove, Upper Norwood. (March, 1897).
- 210 HOYLE, Mrs.; The Vicarage, Stoke Poges, Bucks. (Nov., 1904).
- HUBBARD, GEORGE; 112, Fenchurch Street, E.C. (Jan., 1905).
- HUBBARD, The Hon. ROSE; Seven Gables, Winslow, Bucks. (Dec. 1895; dormant 1897-1906).
- HUGHES, Lady; Shelsley Grange, Worcester. (Nov., 1904).
- HUMPHREYS, RUSSELL; Southborough, Bickley, Kent. (April, 1896).
- HUNTERS, FRANK; 7, York Place, Edinburgh, and Knockhill, Ecclefechan. (Feb., 1906).
- HUSBAND, Miss; Clifton View, York. (Feb., 1896).
- HUTCHINSON, Miss ALICE; Alderton Vicarage, Chippenham, Wilts. (August, 1907).
- INCHQUIN, The Lady; Dromoland Castle, Newmarket-on-Fergus, County Clare, Ireland. (Nov., 1897).
- INGLIS, CHARLES M.; Boghowni Factory, Laheria Serai, P.O., Tirhoot State Railway, India. (Sept., 1902).
- 220 INGRAM, COLLINGWOOD; The Bungalow, Westgate-on-Sea. (Oct., 1905).
- INGRAM, Sir WILLIAM, Bart.; 65, Cromwell Road, London, S.W. (Sept., 1904).
- INNES, Bey, Dr. FRANCIS WALTER, M.B.O.U.; Curator Zoological Museum, Government School of Medicine, Cairo, Egypt. (March, 1903).
- ISAAC, CHARLES; Somerton, Bath Road, Slough. (March, 1906).
- IVENS, Miss; Moss Bank, Greenford Avenue, Hanwell, Middlesex. (August, 1903).
- JARDINE, Miss EMILY; Zungeru, Northern Nigeria, West Africa. (Jan., 1903).
- JOHNSTONE, Mrs. E. J.; Burrswood, Groombridge, Kent. (May, 1900).
- JONES, H.; 13, Commercial Road, Ipswich. (Oct., 1903).
- JONES, Major H.; East Wickham House, Welling, Kent. (Jan., 1906).
- KEMP, ROBERT; c/o Mrs. Warner, Long Sutton, near Langport, Somersetshire. (March, 1903).
- 230 KENNEDY, EWEN; The Leuchold, Dalmeny Park, Edinburgh. (Feb., 1907).
- KERR, N.; Primrose Club, Park Place, London, W. (Oct., 1906).

- KEYTEL, P. CASPER; Box 633, Cape Town, South Africa. (June, 1902).
- LANCASTER, JOHN; Overslade, near Rugby. (March, 1904).
- LANCASTER, Mrs. H. R.; 7, Victoria Terrace, Walsall. (Aug., 1897).
- LASCELLES, The Hon. GERALD, F.Z.S., M.B.O.U.; The King's House, Lyndhurst. (Oct., 1896).
- LAWSON, Mrs. F. W.; Adel, Leeds. (Nov., 1903).
- LEH, Mrs. E. D.; Hartwell House, Aylesbury. (July, 1906).
- LEIGH, CECIL; Lyburn Park, near Lyndhurst, Hants. (Nov., 1906).
- LENNIE, J. C.; Rose Park, Trinity Road, Edinburgh. (Orig. Mem.)*
- 240 LEWIS, W. JARRETT; Corstorphine, Ryde, I. of W. (Oct., 1904).
- LIBRARY OF PRINCETON UNIVERSITY, Princeton, New York. (Nov., 1907).
- LIEBERT, RICHARD O.; Hylands, Chelmsford. (Nov., 1906).
- LILFORD, The Lady; Lilford Hall, Oundle, Northamptonshire. (Jan., 1898).
- LITTLE, GEO. W., M.D.; 47, Ridge Street, Glens Fall, N.Y., United States of America. (Oct., 1903).
- LITTLE, Miss C. ROSA; Baronshalt, The Barons, East Twickenham, Surrey. (May, 1907).
- LEWELYN, Sir JOHN T. DILLWYN, Bart., M.A., D.L., F.Z.S.; Penllergaer, Swansea. (May, 1903).
- LOCKYER, ALFRED; Ashbourne, Selsden Road, Wanstead. (Dec., 1905).
- LODGE, GEORGE E., F.Z.S., M.B.O.U.; The Studios, 5, Thurloe Square, S.W. (Aug., 1905).
- LONG, Mrs.; Sherrington Manor, Berwick, Sussex. (Feb., 1907).
- 250 LOVELOCK, The Countess of; Wentworth House, Chelsea Embankment, London, S.W. (May, 1906).
- LYON, Miss K.; Harwood, Horsham. (Nov, 1894).
- MACCALL, Miss; The Rest, Church Crookham, Fleet, R.S.O., Hants. (May, 1904; dormant).
- MCDONALD, Miss BERYL; Meadow Bank, St. Leonards-on-Sea. (Dec., 1906).
- MCLEAN, COLIN; The Heath, East Dereham, Norfolk. (Nov., 1906).
- MARCHANT, WALTER; Weston Bank, Weston-under-Lizard, Shifnal. (July, 1907).
- MARSHALL, Mrs.; Ashley Warren, Walton-on-Thames. (April, 1906).
- MARSHALL, ARCHIBALD MCLEAN; Bleaton Hallet, Blairgowrie, Perthshire, N.B. (Jan., 1906).
- MARTIN, H. C.; 178, Victoria Road, Old Charlton, Kent; and Saladero Liebig, Fray Bentos, Uruguay. (Jan., 1897).
- MARTORELLI, Dr. GIACINTO, M.B.O.U., etc.; Collezione Turati, Museo Civico di Storia Naturale, Milan, Italy. (July, 1906). (*Honorary Member*).
- 260 MEADE-WALDO, E. G. B., F.Z.S., M.B.O.U.; Stonewall Park, Edenbridge, Kent. (Jan., 1895).
- MELLOR, Mrs.; Fair Lawn, Lytham, Lancs. (March, 1904).
- MICHELL, Mrs.; Crakehall, Bedale. (Sept., 1898).

List of Members.

- MILLER, TINNISWOOD; 27, Belgrave Road, S.W. (March, 1905).
 MITCHELL, HARRY; The Duchy House, Harrogate. (Feb., 1904).
 MITCHELL, P. CHALMERS, M.A., D.Sc., F.R.S., Secretary to the Zoological Society of London; 3, Hanover Square, W. (Aug., 1905).
 MORRSCHILL, F.; Imperial Hotel, Malvern. (June, 1895).
 MOMBHR, Lt.-Col. G. A., F.Z.S.; La Junia, San Remo, Italy. (Sept., 1907).
 MONTAGU, E. S., M.B.O.U.; Trinity College, Cambridge, and 12, Kensington Palace Gardens, W. (May, 1905).
 MOORE, WM. FAWCETT; Ballyanchor Poultry Farm, Lisimore, co. Waterford. (Aug., 1903).
 270 MORSHAD, Lady; Forest Lodge, Binfield, Bracknell, Berks. (Dec., 1894).
 MORTIMER, Mrs.; Wigmore, Holmwood, Surrey. (Orig. Mem.)*
 MURRAY, JOHN, 25, Glasgow Street, Ardrossan. (March, 1903).
 MYLAN, JAS. GEORGE, B.A., M.B. (Univ. Cal.); I.R.C.P. & I.R.C.S. (Ed.) &c., 90, Upper Hanover Street, Sheffield. (Dec., 1901).

 NEWALL, Miss V. F.; Ellingham House, Cheltenham. (March, 1905).
 NEWMAN, T. H., F.Z.S., M.B.O.U.; Newlands, Harrowden Road, Wembley, Middlesex. (*Hon. Business Secretary*). (May, 1900).
 NICHOLS, WALTER B., M.B.O.U.; Stour Lodge, Bradfield, Manningtree. (Jan., 1907).
 NICOLL, MICHAEL J., M.B.O.U.; Zoological Gardens, Giza, Cairo, Egypt. (July, 1906).
 NICHOLSON, ALFRED E.; Blenheim, Forth View Terrace, Blackhall, Midlothian. (Oct., 1896).
 NOBLE, Mrs.; Park Place, Henley-on-Thames. (Oct., 1900).
 280 NORWOOD, EILEE; 28, St. Stephen's Mansions, Smith Square, Westminster, S.W. (Aug., 1901).

 OAKEY, W.; 34, High Street, Leicester. (March, 1896).
 OATES, F. W.; White House Farm, New Leeds, Leeds. (Oct., 1897).
 OBERHOLSER, HARRY C.; 1349, Harvard Street, N.W., Washington, D. C., United States of America. (Oct., 1903).
 ODLING, Mrs.; Duxbury, Oxford Road, Canterbury. (Aug., 1905; dormant 1906-7).
 OGILVIE-GRANT, W. R., F.Z.S., M.B.O.U.; British Museum (Nat. Hist.), Cromwell Road, S.W. (Dec., 1903).
 OGILVY, HENRY S. T. HAMILTON; Biel, Prestonkirk, N.B. (March, 1900).
 OGLE, BERTRAM SAVILE, M.B.O.U.; Steeple Aston, Oxford. (Dec., 1902).
 O'REILLY, NICHOLAS S.; 9, Royal Crescent, Ramsgate. (Dec., 1894).
 OSTREHAN, J. ELIOTT D.; Bank House, Thame, Oxon. (April, 1903).

 290 PAGE, WESLEY T., F.Z.S.; 6, Rylett Crescent, Shepherd's Bush, W. (May, 1897).

List of Members.

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- PALMER, Mrs. G. W.; Marlston House, near Newbury. (Oct., 1905).
- PAM, ALBERT, F.Z.S.; 35, Chester Terrace, N.W. (Jan., 1906).
- PARKER, DUNCAN, J.P.; Clopton Hall, Woolpit, Bury St. Edmunds. (June, 1903).
- PARKIN, THOMAS, M.A., F.R.G.S., F.Z.S., M.B.O.U.; Fairseat, High Wickham, Hastings. (Oct., 1903).
- PAYNE, WALTER HENRY; Lyncombe Hill, Bath. (March, 1907).
- PEARL, Lady; Potterton Hall, Barwick-in-Elmet, Leeds. (June, 1904).
- PEIR P.; Box 504, G.P.O., Sydney; and 50, Bondi Road, Waverley, Sydney, N. S. Wales. (July, 1903).
- PENROSE, FRANK G., M.D., F.Z.S., M.B.O.U.; Wick House, Downton, Salisbury. (Dec., 1903).
- PERCIVAL, WALTER GILBEY; El Damer, Soudan. (Feb., 1902).
- 300 PERRKAU, Capt. G. A., 2/4 Gurkha Rifles, Bakloh, Punjab, India. (Dec., 1903).
- PERRING, C. S. R.; Melic House, Waldegrave Road, Teddington. (Sept., 1895).
- PERRYMAN, C. W.; Bifrons, Farnborough, Hants. (March, 1902).
- PHILLIPPS, NOEL; 21, Addison Gardens, Kensington, W. (Nov., 1901).
- PHILLIPPS, REGINALD; 26, Cromwell Grove, West Kensington Park, W. (Orig. Mem.)*
- PHILLIPPS, Mrs.; 26, Cromwell Grove, West Kensington Park, W. (Orig. Mem.)*
- PHILLIPS, Mrs. E. LORT, F.Z.S.; 79, Cadogan Square, S.W. (April, 1907).
- PICARD, HUGH K.; 10, Sandwell Crescent, W. Hampstead, N.W. (March, 1902).
- PICKFORD, RANDOLPH JOHN; Job's Hill House, Crook, co. Durham. (Feb., 1903).
- POCOCK, R. I., F.Z.S.; Zoological Society's Gardens, Regent's Park, N.W. (Feb., 1904).
- 310 PORTER, G. C.; 38, Mill Street, Bedford. (Dec., 1901).
- POWER, Miss CONSTANCE E.; 16, Southwell Gardens, S.W. (Nov., 1906).
- POWIS, The Earl of; 45, Berkeley Square, W.; and Powis Castle, Welshpool, (April, 1902).
- PRICE, ATHELSTAN, E., M.B.O.U.; 61, Great Cumberland Place, W. (August, 1902).
- PROCTOR, Major F. W., M.B.O.U.; Downfield, Maidenhead. (May 1903).
- PYCRAFT, W. P., A.L.S., M.B.O.U., &c.; British Museum (Nat. Hist.), Cromwell Road, S.W. (Nov., 1904).
- RATHBORNE, HENRY B.; Dunsinea, Castleknock, co. Dublin. (May, 1901.)
- RAWSON, Miss; Millhouse, Halifax. (Nov., 1903; dormant).
- REID, Mrs.; Funchal, Madeira. (Feb., 1895).
- RENAUT, W. E., M.B.O.U.; 15, Grafton Square, Clapham, S.W. (April, 1897).
- 320 RICE, Captain G.; Glayquhat, Blairgowrie, N.B. (May, 1902).
- RICHARD, E.; Hotel Metropole, Brighton. (Orig. Mem.)

- RILEY, JOSEPH H.; U.S. National Museum, Washington, D.C., U.S.A. (June, 1906).
- RITCHIE, NORMAN; The Holmes, St. Boswell's, N.B. (Feb., 1903).
- ROBERT, Madam; Hartland House, Sutton, Surrey. (June, 1906).
- ROBERTS, Mrs., M. Aust. O. U.; Beaumaris, Montpelier Street, Hobart, Tasmania. (June, 1903).
- ROBERTS, Mrs. NORMAN; The Beeches, Baslow, Derbyshire. (Nov., 1907).
- RODON, Major G. S.; Dharwar, Bombay Presidency, India. (Mar., 1906).
- ROGERS, Lt.-Col. J. M., D.S.O., F.Z.S., M.B.O.U. (Late Royal Dragoons); Riverhill, Sevenoaks. (April, 1907).
- ROGERSON, A.; Fleurville, Ashford Road, Cheltenham. (Dec., 1902).
- 330 ROTCH, Mrs.; 3, Beach Lawn, Waterloo, near Liverpool. (June, 1897).
- ROTHSCHILD, The Hon. L. WALTER, M.P., D.Sc., F.Z.S., M.B.O.U.; The Museum, Tring, Herts. (Jan., 1900).
- RUDKIN, F. H.; Belton, Uppingham. (Oct. 1902).
- ST. QUINTIN, WILLIAM HERBERT, F.Z.S., M.B.O.U.; Scampston Hall, Rillington, York. (Orig. Mem.)
- ST. QUINTIN, Miss; Scampston Hall, Rillington, York. (Jan., 1902).
- SALTER, ALBERT J.; Nevill Street, Abergavenny. (March, 1902).
- SAVAGE, A.; 3, Rue Bihorel, Bihorel, Rouen, Seine Inférieure, France. (April, 1895).
- SCHARFF, R. F., Ph.D., Secretary to the Royal Zoological Society of Ireland; Phoenix Park, Dublin. (Oct., 1905).
- SCHERRER, HENRY, F.Z.S., M.B.O.U.; 9, Cavendish Road, Harringay, N. (Dec., 1902).
- SCHWEDER, PAUL E.; Courtlands, Goring—Worthing, Sussex. (Nov., 1902).
- 340 SCLATER, PHILIP LUTLEY, M.A., D.Sc., F.R.S., M.B.O.U.; Odiham Priory, Winchfield, Hants. (Sept., 1902). (*Honorary Member*).
- SCLATER, W. L., M.A., F.Z.S., 1511, Wood Avenue, Colorado Springs, Colorado, U.S.A. (Aug., 1904).
- SCOTT, Professor WILLIAM E. D., Worthington Society, Shawnee-on-Delaware, Pennsylvania, U.S.A. (June, 1900).
- SEPPINGS, Captain J. W. H., Turf Club, Cairo, Egypt. (Sept., 1907).
- SETH-SMITH, DAVID, F.Z.S., M.B.O.U., (*Hon. Editor*); Glengarry, 14, Canning Road, Addiscombe, Surrey. (Dec., 1894).
- SETH-SMITH, LESLIE M., B.A., M.B.O.U.; Alleyne, Caterham Valley, Surrey. (July, 1902).
- SETH-SMITH, Mrs. W.; Alleyne, Caterham Valley, Surrey. (Sept., 1904).
- SHARP, Miss; Spring Gardens, Ringwood, Hants. (Orig. Mem.)
- SHARPE, RICHARD BOWDLER, J.L.D., F.L.S., F.Z.S., M.B.O.U., Assistant Keeper, Zoological Department, British Museum (Natural History); South Kensington, S.W. (Sept. 1902). (*Hon. Member*).
- SHELLY, Captain GEORGE ERNEST, F.Z.S., F.R.G.S., M.B.O.U.; 39, Egerton Gardens, South Kensington, S.W. (August, 1903).
- 350 SHEPHERD, Miss B.; The Den, Walton-on-Thames. (April, 1901).
- SHERBROOKE, Mrs. P.; Douthwaite Dale, Kirbymoorside, Yorks. (March, 1897).

- SICH, HERBERT LEONARD; c/o Rev. E. WATSON, Bepton Rectory, Midhurst, Sussex; and Corney House, Chiswick, Middlesex. (Feb., 1902).
- SILVER ALLEN; Long Melford, Suffolk. (August, 1904).
- SIMPSON, ARCHIBALD; Blackgates House, Tingley, near Wakefield. (Feb., 1901).
- SKEA, E. M.; (Box 373), Pretoria, South Africa. (Jan., 1907).
- SLATER, ARTHUR A.; Prescott Road, St. Helen's. (Nov., 1894).
- SMITH, C. BARNBY; Woodlands, Retford. (August, 1906).
- SMITH, The Rev. JAMES, M.A.; 8, Caxton Road, Broomhill, Sheffield. (May, 1907).
- SONDES, The Earl, F.Z.S.; Lees Court, Faversham, Kent. (Aug., 1905).
- 360 SONDRKIM, EDWARD; Welford House, Arkwright Road, Hampstead, N.W. (April, 1907).
- SORNBORGER, J. D.; Ipswich, Mass., U.S.A. (Oct., 1905.)
- SOUTHSK, The Countess of; Kinnaird Castle, Brechin, N.B. (Feb., 1901).
- SOUTHPORT CORPORATION: W. JAMES HATHAWAY, Curator; Hesketh Park, Southport. (Jan., 1904).
- SPRUE, HEDLEY; 12, Victoria Park, Bangor, Wales. (Nov., 1900).
- STANSFELD, Captain JOHN; Dunninald, Montrose, N.B. (Dec., 1896).
- STANYFORTH, Mrs.; Kirk Hamerton Hall, York. (Nov., 1897).
- STARK, W. P.; Hillstead, Basingstoke. (August, 1903).
- STIRLING, Mrs. CHARLES; Old Newton House, Doune. (Sept., 1904).
- STOCKPORT CORPORATION: FRANK HARRIS, F.R.H.S., Superintendent; Vernon Park, Stockport. (Oct., 1902).
- 370 STURTON-JOHNSON, Miss; Orotava House, Ore, Hastings. (May, 1897).
- SUGGITT, ROBERT; Suggitt's Lane, Cleethorpes, Grimsby. (Dec., 1903).
- SUTCLIFFE, ALBERT; Field House, Grimsby. (Feb., 1906).
- SUTTON, Lady; Benham Park, Newbury. (Dec., 1901).
- SWAN, J. A.; Meadow View, Northcote Road, Sidcup, Kent. (June, 1902).
- SWAYSLAND, WALTER; 47, Queen's Road, Brighton. (Orig. Mem.)*
- SWIFT, DONALD; 58, Avenue Road, Crouch End, N. (Dec., 1898).
- SWINFEN-BROWN, Mrs.; Swinfen Hall, Lichfield. (Feb., 1898).
- TANNER, Dr. FRANK L.; Vanvert House, Guernsey. (Jan., 1904).
- TANNER, Mrs. SLINGSBY; 62, Cheyne Court, Chelsea, S.W. (Oct., 1906).
- TEMPLE, W. R.; Ormonde, Datchet, Bucks. (June, 1907).
- 380 TERRY, Major HORACE A., M.B.O.U. (late Oxfordshire Light Infantry); The Lodge, Upper Halliford, Shepperton. (Oct., 1902).
- TRISCHMAKER, W. H., B.A.; Ringmore, Teignmouth, Devon. (May, 1904).
- THOM, A. A.; Harcourt, Leighton Buzzard. (June, 1895*: dormant).
- THOMAS HENRY; The Vineries, Boroughbridge, York. (Jan., 1895).
- THOMAS, Miss F. G. R.; Hurworth Manor, Darlington. (March, 1899).

- THOMAS, Mrs. HAIG; Creech Grange, Wareham. (August, 1907).
 THOMAS, Mrs. W. F.; Bishopshalt, Hillingdon, Uxbridge. (Oct., 1904).
 THOMASSKT, BERNARD C.; Hawkenbury, Staplehurst, Kent. (July, 1896).
 THOMASSKT, H. P. Cascade Estate, Mahé, Seychelles Islands. (Nov., 1906).
 THOMPSON, Mrs. F. F.; Canandaigua, N.Y., U.S.A. (July, 1907).
 390 THORNILKY, PERCY WRIGHT; Shooter's Hill, Wem., Shrewsbury. (Feb., 1902).
 THORPE, CHARLES; Selborne, Springfield Road, Wallington, Surrey. (Dec., 1901).
 THORPE, F. C.; Eden Villa Zoo, Hedon, Hull. (Jan., 1902).
 THURSBY, Lady; Ormerod House, Burnley. (June, 1895).
 TICEHURST, NORMAN FREDERIC; M.A., M.B., F.R.C.S., F.Z.S.; 35, Pevensey Road, St. Leonards-on-Sea. (Dec., 1906).
 TOMES, W., J.P.; Glenmoor, 31, Billing Road, Northampton. (Dec., 1902).
 TOPHAM, WILLIAM; The Hill, Spondon, Derby. (Feb., 1895; dormant 1902-5).
 TOWNSEND, STANLEY M.; 3, Swift Street, Fulham, S.W. (Sept., 1898).
 TOYE, Mrs.; Stanhope, Bideford, N. Devon. (Feb., 1897).
 TRESTRAIL, Major ALFRED B., F.R.G.S.; Southdale, Clevedon. (Sept., 1903).
 400 TREVOR-BATTYE AUBYN B. R., M.A., F.I.S., etc.; Broxton, Chilbolton, Stockbridge, Hants. (July, 1898).
 TURNER, THOMAS, J.P.; Cullompton, Devon. (Dec., 1895).
 TWEEDIE, Capt. W., 93rd Highlanders; Crosshill, West Hillside, Ayrshire. (April, 1903).
 VALENTINE, ERNEST; 7, Highfield, Workington. (May, 1899).
 VARDON, The Rev. S. A.; Langton Vicarage, Tunbridge Wells. (July, 1905).
 VERR, The Very Rev. Canon; St. Patrick's Presbytery, 21A, Solihou Square, London, W. (Sept., 1903).
 VERNON, Mrs. E. WARREN; Toddington Manor, Dunstable, Bedfordshire. (Nov., 1907).
 VILLIERS, Mrs.; The Shielding, Ayr, N.B. (August, 1906).
 VIVIAN, Mrs.; c/o M. C. Tait, 23, Kidderpore Avenue, Hampstead, N.W. (March, 1903).
 WADDILL, Miss PEDDIE; 4, Great Stuart Street, Edinburgh, N.B. (Feb., 1903).
 410 WALKER, Miss; Hanley Lodge, Corstorphine, Midlothian. (Jan., 1903).
 WALKER, Miss H. K. O.; Chesham, Bury, Lancs. (Feb., 1895).
 WALLOP, The Hon. FREDERIC; 48, Eaton Terrace, S.W. (Feb., 1902).
 WARDE, The Lady HARRIET; Knotley Hall, Tunbridge. (Aug., 1893).
 WATERHOUSE, Mrs. D.; 6, Esplanade, Scarborough. (Feb. 1903).
 WATSON, JOHN A. S.; Ellangowan, Caterham Valley, Surrey. (Dec., 1905).
 WATSON, S.; 37, Tithebarn Street, Preston. (Feb., 1906).*

- WENTWORTH, Mrs.; Wooley Park, Wakefield. (March, 1907).
- WEST, COLIN; The Grange, South Norwood Park. (Jan., 1906).
- WEST, Miss E. E.; The Homestead, Hawthorne Road, Bickley Park, Kent. (April, 1898).*
- 420 WHITAKER JOSEPH I. S., F.Z.S., M.B.O.U.; Malfitano, Palermo, Sicily. (August, 1903).
- WHITEHEAD, Mrs. HENRY; Haslem Hey, Bury, Lancs. (March, 1902).
- WIGLESWORTH, JOSEPH, M.D., M.B.O.U.; Rainhill, Lancashire. (Oct., 1903).
- WIGRAM, Miss FLORENCE E.; Chesnut Lodge, Cobham, Surrey. (July, 1903).
- WIGRAM, Miss MADELINE; King's Gatchell, Taunton. (Sept., 1903).
- WILDE, Miss M.; Little Gaddesden, Berkhamstead. (Dec., 1896).
- WILLFORD, HENRY; Upland View, Haven Street, Ryde, I. of W. (Nov., 1907).
- WILLIAMS, Mrs. C. H.; 49, Oakehampton Road, St. Thomas, Exeter. (May, 1902).
- WILLIAMS, C. J.; Government Offices, Bloemfontein, O. R. C. (Oct., 1906).
- WILLIAMS, Mrs. HOWARD; Oatlands, Sundridge Avenue, Bromley, Kent. (April, 1902).
- 430 WILLIAMS, SYDNEY, Jun.; Holland Lodge, 275, Fore Street, Edmonton, N. (Feb., 1905).
- WILLS, Mrs. H. H.; Barley Wood, Wrington, R.S.O., Somerset. (Nov., 1906).
- WILMOT, The Rev. RICHARD H.; Poulton Vicarage, Fairfield. (Dec., 1902).
- WILSON, The Rev. C. W.; St. James Vicarage, Holloway. (June, 1904).
- WILSON, MAURICK A., M.D.; Kirkby Overblow, Pannal, S. O., York. (Oct., 1905).
- WILSON, T. NEEDHAM; Oak Lodge, Bitterne, near Southampton. (Dec., 1901).
- WILTON, The Countess of; The Hatch, near Windsor. (Oct., 1905).
- WINCHILSEA and NOTTINGHAM, The Countess of; Harlech, Merioneth. (April, 1903).
- WINDHORN, H.; Alfeld a Leine, Germany. (April, 1907).
- WOLFE, Miss GEORGINA; S. John's, 57, Grauada Road, E. Southsea. (August, 1904).
- 440 WORKMAN, WM. HUGHES, M.B.O.U.; Lismore, Windsor, Belfast. (May, 1903).
- WORMALD, H.; The Heath, Dereham, Norfolk. (Dec., 1904).
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RULES OF THE AVICULTURAL SOCIETY.

As Amended August 1905.

1.—The name of the Society shall be THE AVICULTURAL SOCIETY, and its object shall be the study of Foreign and British Birds in freedom and in captivity. Poultry, Pigeons, and Canaries shall be outside the scope of the Society. The year of the Society, with that of each volume of the Society's Magazine, which shall be known as *The Avicultural Magazine*, shall commence with the month of November and end on the 31st of October following.

2.—The Avicultural Society shall consist of Ordinary and Honorary Members; and the latter shall be restricted in number to six, and be elected by the Council.

3.—The Officers of the Society shall be elected, annually if necessary, by Members of the Council in manner hereinafter provided, and shall consist of a President, one or more Vice-Presidents, a Business Secretary, a Correspondence Secretary, an Editor, a Treasurer, an Auditor, a Scrutineer, and a Council of fifteen Members. The Secretaries, Editor, and Treasurer, shall be *ex officio* Members of the Council.

4.—New Members shall be proposed in writing; and the name and address of every person thus proposed, with the name of the Member proposing him, shall be published in the next issue of the Magazine. Unless the candidate shall, within two weeks after the publication of his name in the Magazine, be objected to by at least two Members, he shall be deemed to be duly elected. If five Members shall lodge with the Business Secretary objections to any candidate he shall not be elected, but the signatures to the signed objections must be verified by the Scrutineer. If two or more Members (but less than five) shall object to any candidate, the Secretary shall announce in the next number of the Magazine that such objections have been lodged (but shall not disclose the names of the objectors), and shall request the Members to vote upon the question of the election of such candidate. Members shall record their votes in sealed letters addressed to the Scrutineer, and a candidate shall not be elected unless two-thirds of the votes recorded be in his favour; nor shall a candidate be elected if five or more votes be recorded against his election.

5.—Each Member shall pay an annual subscription of 10/-, to be due and payable in advance on the 1st of November in each year. New Members shall pay, in addition, an entrance fee of 10/6; and, on payment of their entrance fee and subscription, they shall be entitled to receive all the numbers of the Society's Magazine for the current year.

6.—Members intending to resign their membership at the end of the current year of the Society are expected to give notice to the Business Secretary before the first of October, so that their names may not be included in the "List of Members," which shall be published annually in the November number of the Magazine.

7.—The Magazine of the Society shall be issued on or about the first day of every month,* and forwarded, post free, *to all the Members who shall have paid their subscription for the year; but no Magazine shall be sent or delivered to any Member until the annual subscription shall have reached the hands of the Business Secretary.* Members whose subscriptions shall not have been paid as above by the first day in September in any year shall cease to be members of the Society, and shall not be re-admitted until a fresh entrance fee, as well as the annual subscription, shall have been paid.

8.—The Secretaries, Editor, and Treasurer shall be elected for a term of five years, and, should a vacancy occur, it may be temporarily filled up by the Executive Committee (see Rule 10). At the expiration of the term of five years in every case, it shall be competent for the Council to nominate the same officer, or another Member, for a further term of five years, unless a second candidate be proposed by not less than twenty-five members of at least two years standing, as set forth below.

In the September number of the Magazine preceding the retirement from office of the Secretaries, Editor, or Treasurer, the Council shall publish the names of those gentlemen whom they have nominated to fill the vacancies thus created; and these gentlemen shall be deemed duly elected unless another candidate or candidates be proposed by not less than fifteen Members of at least two years standing. Such proposal, duly seconded and containing the written consent of the nominee to serve if elected, in the capacity for which he is proposed, must reach the Business Secretary on or before the 15th of September.

The Council shall also publish yearly in the September number of the Magazine the names of those gentlemen nominated by them for the posts of Auditor and Scrutineer respectively.

9.—The Members of the Council shall retire by rotation, two at the end of each year of the Society (unless a vacancy or vacancies shall occur otherwise) and two other Members of the Society shall be recommended by the Council to take the place of those retiring. The names of the two Members recommended shall be printed in the September number of *The Avicultural Magazine*. Should the Council's selection be objected to by fifteen or more members, these shall have power to put forward two other candidates whose names, together with the signatures of not less than fifteen Members proposing them, must reach the Hon. Business Secretary

Owing to the extra pressure of work, the October and November numbers are liable to be late.

by the 15th of September. The names of the four candidates will then be printed on a voting paper and sent to each member with the October number of the Magazine, and the result of the voting published in the November issue. Should no alternative candidates be put forward, in the manner and by the date above specified, the two candidates recommended by the Council shall be deemed to have been duly elected. In the event of an equality of votes the President shall have a casting vote.

10.—Immediately after the election of the Council, that body shall proceed to elect three from its Members (*ex officio* Members not being eligible). These three, together with the Secretaries and Editor, shall form a Committee known as the Executive Committee. Members of the Council shall be asked every year (whether there has been an election of that body or not) if they wish to stand for the Executive, and in any year when the number of candidates exceeds three there shall be an election of the Executive.

The duties of the Executive Committee shall be as follows :

- (i). To sanction all payments to be made on behalf of the Society;
- (ii). In the event of the resignation of any of the officers during the Society's year, to temporarily fill the vacancy until the end of the year. In the case of the office being one which is held for more than one year (*e. g.* Secretaries, Editor, or Treasurer) the appointment shall be confirmed by the Council at its next meeting;
- (iii). To act for the Council in the decision of any other matters that may arise in connection with the business of the Society.

The decision of any matter by the Executive to be settled by a simple majority (five to form a quorum). In the event of a tie on any question, such question shall be forthwith submitted by letter to the Council for their decision.

The Executive shall not have power

- (i). To add to or alter the Rules;
- (ii). To expel any Member;
- (iii). To re-elect the Secretaries, Editor, or Treasurer for a second term of office.

It shall not be lawful for the Treasurer to pay any account unless such account be duly initialed by the Executive.

It shall be lawful for the Business Secretary or Editor to pledge the Society's credit for a sum not exceeding £15.

Should a Member wish any matter to be brought before the Council direct, such matter should be sent to the Business Secretary with a letter stating that it is to be brought before the Council at their next meeting; otherwise communications will in the first place be brought before the Executive.

A decision of a majority of the Council, or a majority of the

Executive endorsed by the Council, shall be final and conclusive in all matters.

11.—The Editor shall have an absolute discretion as to what matter shall be published in the Magazine (subject to the control of the Executive Committee). The Business Secretary and Editor shall respectively refer all matters of doubt and difficulty to the Executive Committee.

12.—The Council (but not a Committee of the Council) shall have power to alter and add to the Rules, from time to time, in any manner they may think fit. Five to form a quorum at any meeting of the Council.

13.—The Council shall have power to expel any Member from the Society at any time without assigning any reason.

14.—Neither the Office of Scrutineer nor that of Auditor shall be held for two consecutive years by the same person.

15.—The Scrutineer shall not reveal to any person how any Member shall have voted.



THE SOCIETY'S MEDAL.

RULES.

The Medal may be awarded, at the discretion of the Committee, to any Member who shall succeed in breeding, in the United Kingdom, any species of bird which shall not be known to have been previously bred in captivity in Great Britain or Ireland. Any Member wishing to obtain the Medal must send a detailed account for publication in the Magazine within about eight weeks from the date of the hatching of the young, and furnish such evidence of the facts as the Executive Committee may require. The Medal will be awarded only in cases where the young shall live to be old enough to feed themselves, and to be wholly independent of their parents.

The account of the breeding must be reasonably full so as to afford instruction to our Members, and should describe the plumage of the young and *be of value as a permanent record of the nesting and general habits of the species*. These points will have great weight when the question of awarding the Medal is under consideration.

The parents of the young must be the *bonâ fide* property of the breeder. Any evasion of this rule, in any form whatever, will not only disqualify the breeder from any claim to a Medal in that particular instance, but will seriously prejudice any other claims he or she may subsequently advance for the breeding of the same or any other species.

In every case the decision of the Committee shall be final.

The Medal will be forwarded to each Member as soon after it shall have been awarded as circumstances will permit.

The Medal is struck in bronze (but the Committee reserve the right to issue it in *silver* in very special cases), and measures $2\frac{1}{2}$ inches in diameter. It bears on the obverse a representation of two birds with a nest containing eggs, and the words "The Avicultural Society—Founded 1894." On the reverse is the following inscription: "Awarded to (*name of donee*) for rearing young of (*name of species*), a species not previously bred in captivity in the United Kingdom."

Members to whom Medals have been awarded.

For a list of the Members to whom Medals were awarded during the First Series see Vol. II. (*New Series*), p. 18.

NEW SERIES.

Vol. I., p. 317. Mr. D. SETH-SMITH, for breeding the Greater Button-Quail, *Turnix tanki*, in 1903.

- Vol. I., p. 336. Mr. L. M. SETH-SMITH, for Breeding the Rain-Quail, *Coturnix coromandelica*, in 1903.
- „ „ p. 393. Miss R. ALDERSON, for breeding the White-fronted Dove, *Leptoptila jamaicensis*, in 1903.
- „ „ p. 400. Mr. W. H. ST. QUINTIN, for breeding the Ruff, *Pavoncella pugnax*, in 1903.
- Vol. II., pp. 211 & 263. Mr. D. SETH-SMITH, for breeding the Brush Bronzewing Pigeon, *Phaps elegans*, in 1904.
- „ „ p. 270. Miss R. ALDERSON, for breeding the Rufous Dove, *Leptoptila reichenbachii*, in 1904.
- „ „ p. 278. Mr. D. SETH-SMITH, for breeding the Scaly Dove, *Scardafella squamosa*, in 1904.
- „ „ p. 285. Mr. D. SETH-SMITH, for breeding the Tataupa Tinamou, *Crypturus tataupa*, in 1904.
- „ „ p. 339. Dr. ALBERT GÜNTHER, for breeding the Red-backed Shrike, *Lanius collurio*, in 1904.
- „ „ p. 353. Mr. B. FASEY, for breeding the Yellow-rumped Parrakeet, *Platyercus flaveolus*, in 1904.
- „ „ p. 353. Mr. C. CASTLE-SLOANE, for breeding the Talpacoti Dove, *Chamaepelia talpacoti*, in 1904.
- Vol. III., p. 64. Mr. W. H. ST. QUINTIN, for breeding *Pterocles exustus* in 1904.
- „ „ p. 75. Mrs. HOWARD WILLIAMS, for breeding the Yellow Sparrow, *Passer luteus*, in 1904.
- „ „ p. 130. Miss R. ALDERSON, for breeding the Solitary Ground-Dove, *Leptoptila chlorauchenia*, in 1904.
- „ „ p. 295. Mr. D. SETH-SMITH, for breeding *Turnix varia*, in 1905.
- „ „ p. 352. Sir WILLIAM INGRAM, Bart., for breeding Gray's Bare-throated Francolin, *Pternistes leucoscepus*, in 1905.
- „ „ p. 363. Mr. D. SETH-SMITH, for breeding the Swamp-Quail, *Synæcus australis*, in 1905.
- Vol. IV., p. 24. Mrs. MICHELL, for breeding Forsten's Lorikeet, *Trichoglossus forsteni*, in 1905.
- „ „ p. 30. Mrs. HOWARD WILLIAMS, for breeding the Pileated Finch, *Coryphospingus pileatus*, in 1905.
- „ „ p. 68. Mrs. HOWARD WILLIAMS, for breeding the Pectoral Finch, *Munia pectoralis*, in 1905.
- „ „ p. 70. Mr. W. E. TESCHEMAEKER, for breeding the Green Avadavat, *Stictospiza formosa*, in 1905.
- „ „ p. 117. Mr. A. TREVOR-BATTYE, for breeding the Scaly-breasted Colin, *Callipepla squamata*, in 1905.

- Vol. IV., p. 276. Mr. R. FASBY, for breeding Bourke's Parrakeet, *Neophe-
ma bourkei*, in 1906.
- " " p. 307. Dr. A. G. BUTLER, for breeding the Tambourine Dove,
Tympanistria tympanistria, in 1906.
- " " p. 331. Mr. W. E. TESCHEMAKER, for breeding the Black
Tanager, *Tachyphonus melaleucus*, in 1906.
- " " p. 536. Mr. H. BOUGHTON-LEIGH, for breeding the Great-billed
Andaman Parrakeet, *Palæornis magnirostris*, in 1906.
- " " p. 354. Mr. W. E. TESCHEMAKER, for breeding the Red-headed
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H. Goodchild del et lith.

TWO-BANDED COURSER.
Rhinoptilus bicinctus.

Bale & Danielsson, Ltd. imp.

Drawn from life

Avicultural Magazine,

BEING THE JOURNAL OF THE

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THE DOUBLE-BANDED COURSER.

(*Rhinophilus bicinctus*).

By Captain BOYD HORSBRUGH, A.S.C., F.Z.S.

In April, 1905, I was shooting Quail along the banks of the Modder River in the O.R.C., I was walking in some longish grass when I saw two Rufous Coursers (*Cursorius rufus*) get up and I was going to shoot when I noticed that they were accompanied by a young one, so lowered my gun.

They settled within a hundred yards, and on going up to the place I saw the young bird squatting like a baby lapwing. I picked him up and took him home to my aviary, and for the first few days fed him on white ants and mealworms. I had to watch him closely while he ate the latter as the various Bulbuls, etc., were much too near them to give a stupid baby much of a chance. When I caught him he was simply covered with bird lice, but a dusting of Keating's insect powder soon got rid of them.

Some weeks later I got a young Rufous Courser, which is the same sized bird as the Double Ringed. I put him into the aviary thinking he would be a cheerful companion for my first friend, but he met a speedy death instead. The bird even at that early stage being of a very quarrelsome disposition with other ground birds.

In June I managed to get him on to Century Food, but it was not until July 2nd that he started developing the distinctive double rings round his neck, which caused me to realise that I

had made a complete mistake about this species. The two old birds that were with him the day I found him were most certainly *C. rufus* and so I can only conclude that his own parents were hiding somewhere near.

The young bird quickly got his double rings and was in complete adult plumage by the end of July, which is our cold weather. He had no shelter from cold and thrived well in spite of it, and as a matter of fact he was neither sick nor sorry during the entire time I kept him in South Africa, although exposed more or less to all weathers; in heavy rains we did try to shelter him, but it was no easy matter as he was such a restless being, and also he looked upon the shelters with some suspicion and preferred to paddle about outside in the wet.

His juvenile plumage was exactly like the adult plumage but lacked the black necklaces. Slater says of it:— "This interesting little species is found all over the Karro districts of the Cape Colony, the O.R.C., S.W. part of the Transvaal, Bechuanaland, and German territory, but is not found in the eastern part of Cape Colony, Natal, or Rhodesia as far as our present knowledge goes.

It is found in open country in pairs or small parties, it runs swiftly and is most difficult to flush. In most places it is more abundant in the rainy season than in winter and is probably a partial migrant. It feeds in the wild state chiefly on ants (white) and, as I am informed by Major Sparrow, lays one egg only on the bare ground in a slight depression.

With all respect to my friend Major Sparrow, my brother and I have both found clutches of two eggs on various occasions. The eggs are very handsome, being pale in colour thickly covered with fine lines, both straight and curved, of a yellowish brown; the shape is a rounded oval, with but slight indication of the pointed end, and the measurements average 1.2×1.0 . I found this bird to be semi-nocturnal in both the wild and the tame state, the large and liquid eyes also point to this.

When adult, my bird began his evening song just after sunset and our bridge evenings were enlivened by his mournful whistle, which was surprisingly clear and loud for his size, and

often I have heard this same whistle late at night when camping out.

I kept *R. bicinctus* for fifteen months in my aviary at Bloemfontein and took him home with me last July to the Zoological Gardens in Regent's Park, where he was still alive when I last heard of him. I took him home in a box with a carefully padded top and had the good fortune to have enough mealworms to feed him on, and on these and chopped cooked meat he did quite well. He was always delightfully tame and set up an impatient whistle when his dinner was not up to time. This species does not bathe often, I only saw him do so twice, but he likes a dust bath. He was a bit of a fad about his food and got greatly excited when Barbets, Bulbuls, Glossy Starlings, etc., came down for a share of his saucer, instead of staying by his dinner steadily eating he would chase all round the aviary after one bird and leave six eating hard, then return, have one peck, and then off again after somebody else so that he really worked quite hard for his living. On the ground he was more or less master and inclined to be a bully, so that I was rather amused one day to see him lying stretched out in the sun while a Violet-eared Waxbill preened his feathers for him. Birds of the size of Zosterops and Waxbills he did not mind, probably considering them beneath his notice, but he had an especial dislike of the Starlings.

This bird is quite common near Potchefstroom, Transvaal, where I am now stationed, and generally speaking all over this part of the Transvaal. It should be comparatively easy to collect one or two of this species, which I very much wish to do, but unfortunately I have not yet had the luck to find them. I hope I may be more fortunate in the spring for I very much wish to keep again the little Ringed Courser or "Dravelkie" as the Boers call it.

CRANES AT WOBURN PARK.

By the DUCHESS OF BEDFORD.

Having read Mr. Astley's article on "The Cranes" in the last number of the *Avicultural Magazine*, I think the following notes may be of interest to some of your readers.

The following Cranes have bred at Woburn :—

The Common Crane (*Grus communis*).

The Sarus Crane (*Grus collaris*).

The Demoiselle Crane (*Anthropoides virgo*).

The White-necked Crane (*Anthropoides leucachen*).

The following have nested but have never hatched out :—

The Australian Crane (*Grus australasiana*).

The Stanley Crane (*Anthropoides paradisea*).

The Mantchurian Crane (*Grus japonensis*) has made a nest and sat upon a Rhea's egg which it found in the Park, but they have never laid at Woburn.

The following Cranes have been in the collection, but have never nested :—

The American Crane (*Grus americana*).

The Canadian Crane (*Grus Canadensis*).

The Wattled Crane (*Anthropoides carunculata*) a single bird.

The Asiatic White Crane (*Anthropoides leucogeranus*).

The Demoiselle and Common Cranes have raised their young to maturity.

The White-necked, which have hatched on four occasions, have been unlucky, the young, when well grown, having been drowned in the ponds or killed by other animals.

The young Sarus Crane was also drowned when half grown.

NESTING OF THE CHINGOLO SONG SPARROW,

(*Zonotrichia pileata*).

By W. E. TESCHEMAKER.

I recently received an intimation from our Editor that some copy would be acceptable but, though the spirit is willing, I regret that I have so little of interest to record. The fact is owing to severe illness I have practically no results to record

this season. From the commencement of May until the end of July my aviaries had to look after themselves and, when I was again able to resume the management of them, I found that losses had been so heavy that I had very little material to work with. This is the more annoying because at the time I was taken ill I had some rather interesting nests, namely one of the Violet-eared Waxbill (two young), Lesser Ruddy Waxbill (two young), Blue-breasted Waxbill (eggs), Rufous-backed Mannikin (one young), Grey-necked Serin (three young), and Quail Finch (eggs). None of these young birds came to maturity. I have also had eggs from the Blue Grosbeak, two nests and one egg from the Violet Tanager, one young Sulphury Seedeater, and a nest (presumably containing eggs) on which a hen Paradise Whydah sat steadily for some time. One may talk about the weather, bad luck, etc., but the fact remains that from all the above nothing has been satisfactorily reared except one young *Serinus angolensis*, two young Chingolos, and a large number of Bengalee-Striateds, etc.

Certainly there are times and seasons when the possession of an aviary is anything but a source of pleasure. Indeed, were it not that the aviculturist is born and not made, I doubt if any sensible person would ever enter upon so difficult, laborious, and expensive a hobby. However, in the long run he has his rewards if he be a genuine ornithologist, and perhaps one of the chief of these is to be able now and again to see the nesting operations of a really rare bird.

Needless to say the subject of the present notes does not come under this category, for the Chingolo is quite a common South American species and, as far as my experience goes, quite an easy one to breed. It would not in the least surprise me to hear that it has already been bred and possibly several times over. Our Editor writes me that he has succeeded in crossing this with an allied species.

I think it has before been remarked in our Magazine that the term Song Sparrow is more or less of a misnomer, as applied to this species, for its song is certainly not remarkable and it is more nearly allied to the Buntings than to the Sparrows.

I had a couple of Chingolos in a well-shrubbed aviary in

1905, but they made no attempt to nest. In March, 1906, the same birds commenced to carry building materials into a small cupressus and, to give them a better chance, I enclosed them and the cupressus and a pair of Accentors (which also seemed inclined to nest) with some herring netting. It is curious that the Accentors, though generally such shy birds, nested successfully under these conditions, but the Chingolos at once suspended operations. I then removed them to the Waxbill's aviary where, to my great astonishment, I one day found two nests, within a few inches of one another, one containing three and the other two eggs, and one Chingolo sitting in each! In a word they were two hens.

The sexual characteristics of this species do not seem at all well marked. I selected these two birds with some care. One was a larger bolder bird and had a much more pronounced crest—but it was a hen for all that.

This season I was not satisfied until I had obtained a bird that actually sang, and then, having caught up one of my last year's birds, I was reasonably sure that I had a pair. I really, however, can see very little difference between them, so far as their outward and visible form is concerned, save that the chestnut patch on the neck of the male is certainly brighter.

As this species has with me proved itself far from amiable in general company, I turned them out by themselves in a breeding pen this spring.

In their new quarters the male soon commenced to sing. I think the song of this species must vary a good deal in individuals. The Zoological Society turned out a good many Chingolos in a pen near the Monkey House this summer, and I noticed that several of them were singing quite a bright little refrain consisting of a few preliminary staccato notes and ending with a kind of trill, but my bird can only produce a monotonous phrase consisting of generally only four notes, sibilant and long drawn out, reminding one of the silvery cadence of the Willow Warbler.

I regret that this season, for the reasons given above, I have not been able to enter dates in my note book, but towards the middle of July I first noticed the hen sitting. Owing to the

awkward position of the nest I could not see exactly how many eggs she was incubating, When she had sat three weeks I concluded the eggs were unfertile and turned a second hen into the enclosure. Apparently on the principle that "two is company : three is none" the original pair fell upon the new comer and the following day I had the mortification of removing its mangled remains.

Matters now resumed their former course—the hen sitting steadily, the cock singing industriously.

After incubation had proceeded in this way for a month I examined the nest carefully and, to my very great astonishment, found that it contained four eggs and two young birds only a few days of age. I can only explain this by assuming that the hen laid three eggs, sat a fortnight, then laid three more eggs and sat another fortnight—an event which has never occurred before in my aviaries.

The eggs I examined in 1906 had a white ground colour, but this season's eggs were of a light bluish green with spots and blotches of light brown and olive, the spots in some cases forming a ring round the larger end of the egg, as with our Red-backed Shrike. The eggs are large for the size of the bird.

The young birds had some whitish down on their heads and backs. They grew and feathered very rapidly, the hen doing nearly all the feeding, and taking nothing to the young but live insect food.

On leaving the nest the young had the two broad bands on the head dark brown instead of black ; the cheek markings and the black stripes behind and below the eye similar to the adults, but no chestnut patches on the neck ; the scapulars not so boldly striped and instead of the uniform grey tone of the breast of the adults, a light brown ground colour closely spotted with dark brown, like a Skylark. The head markings soon became darker, and the spots began to disappear from the lower part of the breast. The young very quickly became independent and are now flourishing.

I should think this is a very likely species to have been bred as it seems hardy and easily acclimatised, but I have not yet been able to hear of a definite instance. Mr. Pocock

writes me that the Zoological Society has not yet succeeded in producing any young Chingolos.

P.S.—I see in Dr. Butler's most excellent Handbook on "Foreign Bird Keeping" the statement that "the nest is built in a depression on the earth: very rarely in a bush or on a stump." The four nests built in my aviaries (and the hen is now building a fifth) have all been placed in shrubs about four feet from the ground.

P.S.—Oct. 22. After the fifth nest had been removed this hen constructed a sixth at the very highest point in the enclosure, 7ft. 6in. from the ground, and again laid three eggs.

ON BREEDING BATHILDA RUFICAUDA.

By JOAN GLADSTONE.

I was away from home when the nest was started, and also after September 4th, so cannot say very much about the progress of the building. The cock had been carrying hay about for some time. A small portion of an ant-hill was put in the aviary every day, but latterly there have not been many ants' cocoons in the heap, so that the birds must have either eaten the ants or the other insects found in the earth.

The parent birds have been in my possession two years and have wintered out-of-doors.

August 13th. Rufous-tails in out-door aviary reported as sitting on three eggs; certainly four or five laid, as ascertained later.

August 19th. One chick hatched.

August 27th (or about that date) two chicks; two eggs dropped through the very loosely woven hay of the nest, which was shaped rather like an egg standing on its small end, with the opening high up on one side facing S.W. It was made of coarse hay, lined with moulted Canary feathers and firmly fixed to a big Mediterranean heath bush about 4ft. 6in. from the ground. Chicks had dark grey down, with black and white speckles on the wing-feathers.

August 31st. Chicks partly feathered, still dark grey with



Photo by Rev. H. W. Laidlay.

THE TRUMPETER BIRD.
Psophia crepitans.

Bale, Sons and Danielsson, Ltd.

speckly wings. On a closer inspection there is a brown tinge on all except the tips of the wing-feathers.

September 4th. One chick dead, one left nest.

September 18th. One chick, as large, if not larger than its parents, with yellow brown plumage and black beak, was being constantly fed by the cock. It was less yellow in colour than the parents and was greyish underneath. Its voice was extraordinarily strong and its call for food something between a young Canary's squeak and the adult Rufous-tail call-note.

September 28th. Still being fed by parents.

THE TRUMPETER BIRD

(*Psophia crepitans*).

By MRS. GREGORY.

I have long wanted to possess a Trumpeter Bird and was fortunate in securing the only one Mr. Harper brought from tropical America last July. Having had it barely three months I have much to learn and feel anxious as to how it will stand a winter out-of-doors even in a very sheltered garden. I have been told that these birds do not live long in England, which, I suppose, is the reason why they are difficult to obtain. I cannot imagine they would do well in an aviary however large, as they require a great deal of exercise and liberty and much attention and petting bestowed upon them. My bird is always anxiously looking out, and runs to meet me every time I enter the garden, and I find it difficult to leave him for many hours. I have read of the extraordinary courage of the Trumpeter and have now had proof of it. He made himself master of my five Cranes as soon as he arrived, not by bullying and worrying them, but simply shewing them he would be first. When any grain is thrown, he rushes with his beak wide open at each Crane in turn and they fly up over his head to escape, and yet he does not care for corn but will eat it rather than see them do so. In their own country the "Agami" (as the natives call the Trumpeter Bird) is trained to drive sheep and poultry. Perhaps mine has had this training, for Mr. Harper tells me it is hand-reared and he procured him

from the Aborigines. At any rate he assists energetically in driving up the Crowned Crane, jumping up at his head from one side to the other and even springing on to the Crane's back and pecking violently at the crest feathers if the Crane tries to dodge back, but he, I am glad to say, has lately had the sense to go to bed earlier and goes to the far end of the house which the two birds share. Like the Cranes, the Trumpeter roosts standing on one leg, but not on the ground. He climbs into a pear tree, and is anxious to remain out, but, acting on advice, I harden my heart and take him down by force in spite of kicks and struggles. As a compromise, I have had the branch he prefers cut from the tree and put into his house. Referring again to the Trumpeter's pluck I have seen it make a rush at a cat and even at a small dog, but fortunately their owners came to the rescue. Also he had a fight with my Swinhoe Pheasant and came off with a bleeding head. The photograph gives an excellent idea of his appearance. He is not larger than a fowl, but his legs and neck being so much longer make him appear tall. The whole plumage is black except a sprinkling of feathers on the neck and breast which are tipped with green changing into violet, according to the light. The little soft round head looks as if covered with black plush or velvet. Across the middle of the back and wing coverts is a brownish patch, which passes into ash colour lower down. The legs are very faintly tinged with green. The voice of the Trumpeter is most peculiar, a sort of low hollow sound made with the beak shut, when the bird is excited.

I give it grasshoppers, centipedes, caterpillars, and all the insects I can get, as it prefers them to any food. Also worms, of which it will eat any quantity. It also has boiled rice and hard-boiled eggs. Occasionally a little potatoe and banana.

It is a very clean bird, and follows me into the house and from one room to another, often perching on chairs and tables, where it stands preening itself. One of its pretty ways is to stand and hold out its head and neck to be stroked. It will remain in this position for some minutes, but moves away directly its body is touched.

NOTES ON AVICULTURE IN GEORGETOWN, DEMERARA.

By E. WILLIAM HARPER, F.Z.S.

Perhaps it may not be out of place to remind our readers that Georgetown, the chief town of Demerara—"where the sugar comes from"—and capital of British Guiana, is situate on the coast at the mouth of the river Demerara in lat. about 7° N. It must not, however, be conjectured that, from its close proximity to the equator, Georgetown is a very hot place; for, thanks to the trade-winds which blow for about ten months in the year, the average temperature is only 84°. During August and September, in the absence of the "trades," it gets a little hotter; whilst during December and January it may be said to be really cold at nights, when a blanket may be styled a blessing. Demerara is low-lying and therefore damp, with a necessarily humid atmosphere.

Before coming to the birds, I may state that the blacks of the colony are *not* aviculturists—a direct contrast to what one finds in the east, where real enthusiasm and skill amongst the natives exist. The visitor to Georgetown is sure sooner or later to make the acquaintance of a well-known local character, namely, a Portuguese bird-seller, who meets all mail steamers. If he cannot manage to get an interview on the landing-stage, he will make it his business to find out where you are staying—not a difficult matter where "whites" are in the minority—and give you a call; when you will have an opportunity of inspecting his live-stock, which generally consists, besides birds, of monkeys and curios obtained from the aborigines in the interior. The small birds are confined in cages or "quakes"—baskets made of cane-work with a mesh varying from half an inch to one inch—which are suspended in a row from a bamboo carried horizontally in one hand; in the other hand is generally another bamboo with a row of Parrots and Macaws sitting upon it, each tied by one leg. Some of the monkeys sit upon the bamboo above the "quakes" and cages; whilst others enjoy more exalted positions upon the shoulders or head of the vendor.

To begin with the Parrots: in the general market—where,

in addition to provisions, fruit, meat, fish, ice, poultry, etc., birds are always on sale—Parrots “in bulk” (to use a commercial expression) are kept by dealers in packing-cases, provided with perches and covered with wire netting. Their chief food whilst awaiting purchasers consists of sugar-cane and maize; water, I regret to state, is in some cases very seldom given. Considering that a sugar-cane about ten feet long and an inch and a half thick can be bought for rd., this diet is decidedly economical; it is also much relished by the Parrots, which obtain from it food, moisture and occupation. That *bête-noire* of Parrot-keepers—feather-plucking—is seldom seen. The commonest Parrot, and I might almost say the commonest *cage-bird*, in Georgetown is the Orange-winged Amazon (*Chrysotis amazonica*), known locally as the “screecher”—a name which it well deserves. In private houses these birds are often chained by one leg to a horizontal perch, nailed at right-angles to a board which hangs against the wall. They are also confined in circular-topped wire cages about fifteen inches in diameter, fitted beneath with an outside tin tray, through the turned-up edges of which a metal pin runs. These excellent cages can be purchased for about 4/- each, and last for years. Cheaper Parrot-cages have a solid tin top and bottom, with hollow tin bars and sliding door. As these have no removable bottom, the bird is able to enjoy a bath, from the splashing which takes place during the weekly or bi-weekly cleansing of the cage under the water tap. The local price of the “screecher” is about 4/-. Many of them are hand-reared by the aboriginal Indians, who bring them down the river to town and sell them to local dealers. I once saw an East Indian—an ex-cooly immigrant—with about two dozen adult freshly-caught “screechers” in a box exposed for sale on the foot-path at 2/6 each. They were savage as wolves, “going for” the hand of the intruder with beak and claw. In answer to my inquiry as to how he had caught them, the vendor said it was done by slipping a noose, attached to the end of a stick, over the head of the bird at night as it sat in a tree; the catcher stealthily climbing the tree for the purpose. Whether he was telling the truth or not—perhaps looking on me as a rival catcher—I cannot say; but that is the method adopted in catching tree-lizards. In

addition to sugar cane and maize, private owners also give their Parrots red and green capsicum, plantain, and bread soaked in coffee. Plantains are a kind of bananas, but harder and less sweet than the latter. There is a foolish superstition amongst the natives that bananas prevent linguistic ability in Parrots; and that they will kill the bird if persistently given.

Other Amazons commonly kept are the Yellow-fronted (*Chrysotis ochrocephala*) called the "Amazon," and the Mealy (*C. farinosa*) or "Saurama."

The Red-vented Parrot (*Pionus menstruus*), and less frequently the Dusky (*P. fuscus*) and the Black-headed Caique (*Caica melanocephala*)—always hand-reared by the aborigines—are sometimes on view. A red-vented which I possessed used to spend more time outside its cage than in it; and became rather a nuisance by caressing my face when I was asleep. The Hawk-headed Caique (*Deroptyus accipitrinus*) is rare. One belonging to a negress used to have its liberty in a tree over her house; and although I offered her a good price, she refused to sell. When I called sometime afterwards to increase my offer, I found the bird had died; and upon my saying "It serves you right," she acquiesced with a broad grin, disclosing a lovely set of teeth.

There are generally a few Macaws on view, the commonest being the Blue and Yellow (*Ara ararauna*), I had one which was so tame it would follow me about outside. A fine pair of the Red and Blue (*A. macao*) are at liberty in the splendid Botanical Gardens; spending the day in the trees, and retiring at night to the shelter of an aviary. The Red and Yellow (*A. chloroptera*), Hahn's (*A. hahni*), and another small green species called the "Eta" Macaw (named *A. macavuanna* in the local museum, but which I have been unable to verify elsewhere) are also occasionally to be seen. Two young ones of the last-named species were fed for weeks and reared by my tame Red-vented Parrot, already mentioned; and very comical it was to see them running about the floor after their smaller foster-parent, which regurgitated the food for their benefit in proper parrot fashion.

Of Conures, the Yellow (*Conurus solstitialis*), called locally the "kissi-kissi," and the Blue-winged (*Pyrrhura picta*) or

"scaly-breasted" are amongst those species sometimes kept. The commonest is the Brown-throated (*C. æruginosus*), which is sometimes hawked about the streets in a freshly-caught condition, and can be observed flying in small flocks just outside the town. The Golden-winged Parrakeet (*Brotoperys tuipara*), so destructive to the woodwork of cages, is not uncommon. The Guiana Love Birds (*Psittacula guianensis*) appear to be all imported from the neighbouring colony of Dutch Guiana: they breed freely in captivity in quite small cages, the cock being very fussy when he becomes a father. Although owing to the "safety in numbers" several dozen may be put together, yet two pairs in one cage cannot agree, as I proved to my cost—one cock promptly killing the other. A few African Greys are occasionally imported, either direct from West Africa by sailing-ship, or via Madeira.

The Toucans, called locally "bill birds"—those beaky birds reminding one so much of the Hornbills of the Old World—should perhaps be mentioned next. Dealers tell me that they do not find a ready sale; but young hand-reared birds are occasionally seen. It is astonishing how tame these birds become: I have seen one, which was allowed its liberty in a small garden, hopping into a crowded street in which trams were continuously passing. One which I possessed was allowed to come out of its cage daily to bathe in a wash-hand basin; at night it roosted upon a towel-horse, turning its tail over its back in true Toucan fashion. The two species most often met with are the Sulphur-and-white-breasted (*Ramphastos vitellinus*) and the Toco (*R. toco*).

Next to the Parrots in point of favour as cage birds come the Finches. They are generally kept in well-made wire cages, each provided with a sliding drawer at one end for seed, and a wooden false-bottom. Sand is never given. On one occasion I was explaining to a man how important it was that Finches should be supplied with sand, when he replied quite seriously, "I think they prefer seed!" It may surprise our members to hear that owing to a specific duty on bird-seed, canary-seed is retailed in Georgetown at 5d. and 6d. per lb. Cages containing small birds can safely be hung out of doors in Demerara, owing to the

absence of Crows and Kites, which make such a proceeding impossible in the Eastern tropics. Though somewhat of a digression, it may be mentioned that there are no Sparrows in the Colony. After not having seen them for over three years, they now appear larger to me than formerly—certainly their impudence has not decreased. Bird-lime—the milky exudation from a tree—and trap cages are the means of capture principally adopted. This local bird-lime has the disadvantage that, unless it is removed at once with oil, the birds' feet are liable to suffer on account of its irritating properties.

The seed-eater most commonly kept is the Field Saffron Finch (*Sycalis arvensis*), with its rasping song, like the running down of a watch-spring. This bird is known locally as the "colony canary" and "bastard canary." The mortality amongst freshly-caught seed-eaters is considerable, owing to their being fed immediately after capture upon hard seed, instead of first softening it by soaking in water. Another fatal practice is that of overcrowding the cages so that the drinking water becomes fouled.

Undoubtedly the best songster in the colony is the Thick-billed Seed Finch (*Orizoborus crassirostris*) or "twa-twa"; and a good performer fetches a high price. Although this species prefers paddy-rice to canary seed it is thoughtlessly fed upon the latter: in spite of the fact that the former, being grown upon the spot, is only about a fourth the price. Old male "twa-twas" are black with light-coloured beaks; old females are brown, also with light beaks. The young of both sexes are brown with black beaks. The colour-change in the males takes place apparently at the age of about a year, or perhaps a few months less; the black appearing gradually in a patchy manner. Almost like an undersized "twa-twa" in build, but with a chestnut-breast and abdomen, is the "towa-towa" or Tropical Seed Finch (*O. torridus*). Like the young "twa-twa" the immature "towa-towa" is brown, and the song of the latter, though not equalling that of its larger relation, is still very sweet.

The genus *Spermophila* contains some interesting and favourite species: the White-throated Finch or "ring-neck" (*S. albigularis*); the Lavender-backed Finch or "blue-back" (*S.*

castaneiventris); the Fire-red Finch (*S. minuta*); the Lined Finch (*S. lincola*); and the Black-headed Lined Finch (*S. ocellata*). The two last named are called "moustache birds"; whilst the whole of the genus are spoken of as "grass-birds." The immature males of all the five species just mentioned are brown, varying somewhat in intensity; the three first-mentioned species sing. By the bye, natives of Demerara speak of singing as "rattling."

Although our Magazine does not cater for Canaries, these notes would not be complete without including these ubiquitous birds; their chief admirers appear to be the Portuguese—of whom there is quite a large population in the colony—who import the birds in cane cages from Madeira. Along with the Canaries come a few Goldfinches from the same island.

(*To be continued*).

BREEDING OF THE ROULROUL OR RED-CRESTED WOOD-PARTRIDGE.

Rollulus roulroul.

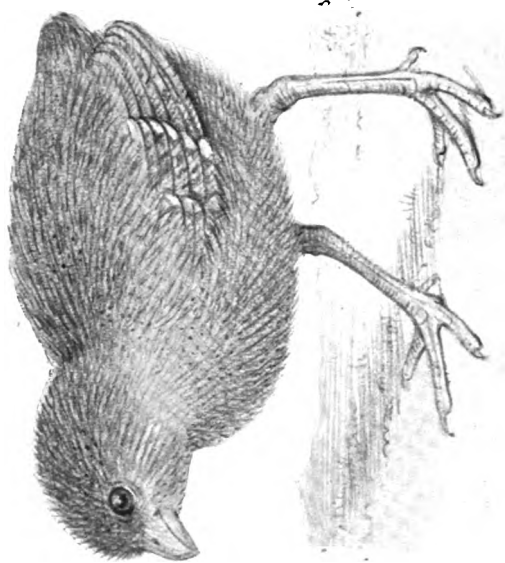
By Sir WILLIAM INGRAM, Bart.

I believe it may safely be said that until my two Roulroul Partridges hatched their chicks no young of this rare species had ever been seen by a civilized human being. I have been informed that eggs have been produced in this country (at the Zoological Gardens), but in this case the female would not incubate them.

My two birds were bought from a dealer in Marseilles in 1905, and in 1906 laid four eggs which were successfully hatched, but all four chicks were a few days afterwards destroyed by rats.

This year, the parents again succeeded in hatching three young birds, two of which, unfortunately, died a few days after leaving the eggs, but one survived for over three weeks. I attribute the death of this last bird to unsuitability of food, no ants' eggs being procurable, or perhaps the excessive heat may have been the cause of their decease.

The parents have lived since I bought them in one of my aviaries at Monte Carlo. They are not very shy birds except



Collingwood Ingram del.

YOUNG OF *RALLUS ROULROUL*.

About three weeks old.

Bass, Sons and Danielson, Ltd

perhaps during the breeding season. The female constructs a curious domed nest, which is very cunningly concealed among the grasses and brushwood of the aviary. The dome is considerably flattened with a small and proportionately low aperture. It is constructed of dry grasses and as in the last nest, of fronds of dead palm leaves.

Once the female has completed her nest the male keeps as far as possible from his partner's abode, and leaves all the sitting to his mate. She seldom leaves the nest and then only for a very short time, always closing up the entrance during her absence.

It is after eighteen days' incubation that the chicks emerge from their eggs, and when first born are sweet little fluffy beings of a dark chocolate colour. Although the head of one that died a day after its birth shewed indications of a reddish tinge when under close inspection, the chick, of which an illustration is given, is the one that survived over three weeks, and I infer it may have been a female as I could find no indication of reddish colour on its head; this, I should say, is confined to the male chicks.

Both parents fed the young, food being taken from their beaks when they had picked up any dainty bit, the while calling their little ones with a low-tuned chirp.

In the week before the death of the last chick, the female Roulroul built three more nests, all domed like the one in which the bird deposited her eggs. Could these have been constructed as hiding places for her baby? They certainly were not used for a second clutch of eggs, as the female had not begun to lay again.

I hope next year I may be more successful. A good supply of fresh ants' eggs shall be ready, one or two eggs shall be reserved for an incubator, and an attempt to hand-rear them made in the same way that Mr. Seth-Smith did so successfully with his Hemipodes.

In the three-week-old chick the quill feathers were so well advanced that I have little doubt, even at this early age, it could fly well as is the case with the precocious young of many other Gallinaceous birds. The rectrices were also developed. The

nestling down was a uniform dark chocolate brown, but the wing feathers were faintly barred, and the secondaries and coverts being tipped with white, indicating a mottled appearance in the first plumage. Legs and bill were bright red.

NOTICES OF NEW BOOKS, ETC.

THE SEXING OF LIVING BIRDS.

The difficulty of determining the sex of those birds in which the plumage is superficially alike in both male and female is one that troubles the majority of aviculturists perhaps as frequently as any other matter that may arise in connection with their hobby. What can be more annoying, after having paid a high price for a couple of very rare birds which it is hoped, in course of time to breed, than to discover that both belong to the same sex? With many birds, of course, the sexes, when adult, are perfectly distinct, but in such cases the young males often resemble the female, and the tyro may find that after a time his "hen" commences to show bright feathers, and eventually "turns into a cock." In other species, such as the Weavers, the males assume their characteristic plumage only for a certain period of each year, at other times being more or less similar to the females.

Thus the aviculturist, unless he is quite experienced, is beset with difficulties and may very easily make mistakes in selecting his birds if he relies upon his own judgment, or the word of the dealer from whom he purchases.

Dr. Butler, who is always ready to help in avicultural matters, has spared no pains in the preparation of one of the most useful helps to the aviculturist that has appeared for a long time. "How to Sex Cage Birds" ("The Feathered World" office, 9, Arundel Street, W.C., price 3/6), deals with every species that the ordinary mortal is likely to come across and many more as well, and where there is a means of distinguishing the sexes the author has pointed it out.

In preparing the work Dr. Butler has not relied entirely

upon his own extensive knowledge of living birds, he has consulted all the reliable books that could in any way help him, and has gone through the splendid series of specimens in the British Museum. We have the greatest pleasure and confidence in recommending this little book to our members, and can assure them that they really ought to have it.

CAGE BIRD TRAFFIC IN THE UNITED STATES.

We have received a pamphlet, published by the United States Department of Agriculture and written by Mr. Henry Oldys, relating to the traffic in Cage Birds in the United States, which is instructive and interesting reading. Aviculture is quite in its infancy amongst the Americans, and there is very little interest taken in the breeding of foreign species if we may judge from the meagre list given of the species that have bred there; nevertheless the interest is certainly increasing and there is a rapidly growing demand for rare birds.

Canaries, of course, form the bulk of the cage birds imported into the United States, nearly 278 thousand being received, mostly from Germany, in the year ending June 30th, 1906. In the same year some fifty thousand "miscellaneous" birds arrived, of which some 6,000 were Parrots (including Lories, Parrakeets, &c.). The number of Budgerigars imported was 5,387, a few of which were of the yellow variety.

The Java Sparrows imported reached a total of 6,285, *Liothrix* 4,539.

On the whole the prices of the common foreign birds are much higher in the United States than in Europe, which possibly partly accounts for the small amount of interest taken in aviculture in the United States compared with the Old World.

The author of the report, in concluding, deals with the opportunity for American enterprise that is presented by the fact that so many birds can be bred in captivity, and the large and rapidly growing demand that is springing up for cage birds in the United States. At present this demand is satisfied by importation from abroad, but it is suggested that the industry of raising birds might be established, and the American market

supplied by American breeders. The pamphlet contains a very good coloured plate of a Black-headed Gouldian Finch, which the author calls a "Lady Gould Finch."

OWLS OF THE NEARCTIC REGIONS.

The Eleventh Annual Report of the New York Zoological Society contains a very interesting paper on Owls by Mr. Beebe. It is divided into two parts, the first giving an account of Owls in general, in which the author deals exhaustively with their habits, structure, and so forth; the second being a special account of the Owls of the Nearctic region, most of the American species being figured from photographs.

"Only in the last few years," the author remarks, "when our grain crops reach from ocean to ocean, and the devastation of hordes of mice have touched one of the deepest chords of man's nature—his purse—is the Owl getting due credit for his value and economic importance. If every Owl on our Continent was suddenly swept out of existence, it is doubtful if, after a few years, a single crop of grain could be raised successfully. It would take the mice and other rodents and many injurious insects little time to confine all their ravages to the hours of darkness. Hawks would in such an event become almost useless to man, and though weasels and minks might increase prodigiously, yet without the deadly sweep of the Owl, the mice would soon overrun the land."

Dealing with Owls in captivity an interesting point is mentioned regarding the Snowy Owl; special arrangements, we are told, must be made for the birds during the moult, in a hot climate, "they will not moult well or live long if compelled to endure the heat of our southern summer, but if confined to a large flying cage in a cool, dark cellar, every feather will be moulted in as perfect condition as if they had spent the preceding months in their native tundras of the Arctic zone."

STRAY NOTES BY THE EDITOR.

The experiment, organized by members of the Avicultural Society, of liberating a number of Crested and other species of foreign doves in the Zoological Gardens, seems to have been quite a success, so far at least as the Crested species (*Ocyphaps lophotes*) is concerned. These birds have apparently bred freely during the summer, one nest, in a tree near the Goose paddocks having produced at least three pairs of young birds. The keeper who feeds the doves told the writer that one morning no less than fourteen Crested Doves were feeding together on the corn he had thrown down. They allowed him to approach to within a few yards, and he estimated that about half of these were young birds.

The Roulroul Partridge, or Red-crested Wood-Partridge, of whose nesting habits in captivity Sir William Ingram gives so interesting an account in this month's *Avicultural Magazine* is perhaps the most beautiful Partridge in existence. The prevailing colour is bright green, with a steel blue gloss in the male; the wings are rich brown, and the head black, but ornamented with a long hairy maroon-coloured crest and a white band between the eyes. It is a purely forest-loving species, inhabiting Siam, the Malay Peninsula, Java and Borneo, and in a wild state it lives on berries, seeds, green food of various kinds and insects. So far as I am aware no account of the nest has previously been published.

A Correspondent of *The Standard* who, if I mistake not, is a well known Zoological writer and a member of the Avicultural Society, describing Herr Fockleemann's interesting collection of wild animals, etc., at Hamburg writes:—"Of late there has been in England a quite justifiable outcry against the condition of some of the bird shops. If all such establishments were conducted on similar lines to those adopted at Gross-Borstel there would be no cause for complaint. The guiding principles are extremely simple—ample space, absolute cleanliness, and plenty of fresh air." Let us hope that the English dealers will take the hint.

In *Canary and Cage Bird-Life* of September 20, a correspondent records the successful breeding of Avadavats in his outdoor aviary, three young birds being reared.

"The birds built a domed nest of dry grasses, warmly lined with feathers in the outer portion of the aviary some time about the end of July, in a small privet bush, thick with undergrowth, about 6in. from the ground, and laid four small white eggs, three of which proved fertile."

The young birds, up to about nineteen days were fed by both parents, chiefly on insect food, which they caught amongst the vegetation in the

aviary and living ants' cocoons which their owner supplied. Three young left the nest on September 5th, when eighteen or nineteen days old, and were seen to feed themselves on September 14th.

CORRESPONDENCE, NOTES, ETC.

THE KING IBIS.

SIR,—I enclose a photo. of a pair of King Ibis, or Warty-headed Ibis (*Inocotis papillosus*), which I have this summer obtained from India. I understand these birds are rarely kept in this country, though I may be wrong.

The large white patch on the wing-shoulder (hardly visible in the bird on the left side of the photo.), is very conspicuous when the birds fly. The rest of the plumage is brown and dark purple green. The head is nude and covered on the top with red dots. The birds are considerably larger than the Glossy Ibis.

I am told they ought to be omnivorous, but my birds much prefer meat to anything else. I have attempted to get them to eat meal, etc., by mixing it up with the meat, but this is a failure, as they carefully take each piece of meat and wash it in their little pond before eating.

Like other Ibises they are very fond of perching, and of course take small gravel. They seem of an entirely peaceable disposition, and their quaint ways are very interesting. What will be the result upon them of an English winter remains to be seen. They revel in full sunshine. However, as they are now in excellent health and have a good shelter-shed facing South, I am hoping for the best.

C. BARNEY SMITH.

TANAGERS, ETC.

SIR,—In Vol. VI. (*First Series*), pages 103 and 212 of *Avicultural Magazine* peat moss litter is recommended as being good to cover the bottoms of cages or aviaries in which are kept soft food birds, and a certain firm is mentioned as supplying a special kind for this purpose. I recently wrote to the said firm asking about this peat moss but received no reply.

My reason for troubling you with this note is to enquire whether you could kindly tell me of anyone selling this stuff. I have five Tanagers of the small sorts, e.g. Superb, Emerald-grass, Violet, etc. which I am at present keeping in a cage 5ft. long, 2ft. wide, 3ft. high, back of wood which extends to about gin. on two ends and top. Sand, I found is of no use for these birds, and sifted earth is not much better.

Whilst on this topic I am anxious, if possible, to ascertain the best mixture for these birds; that sold by Abrahams I notice often mentioned

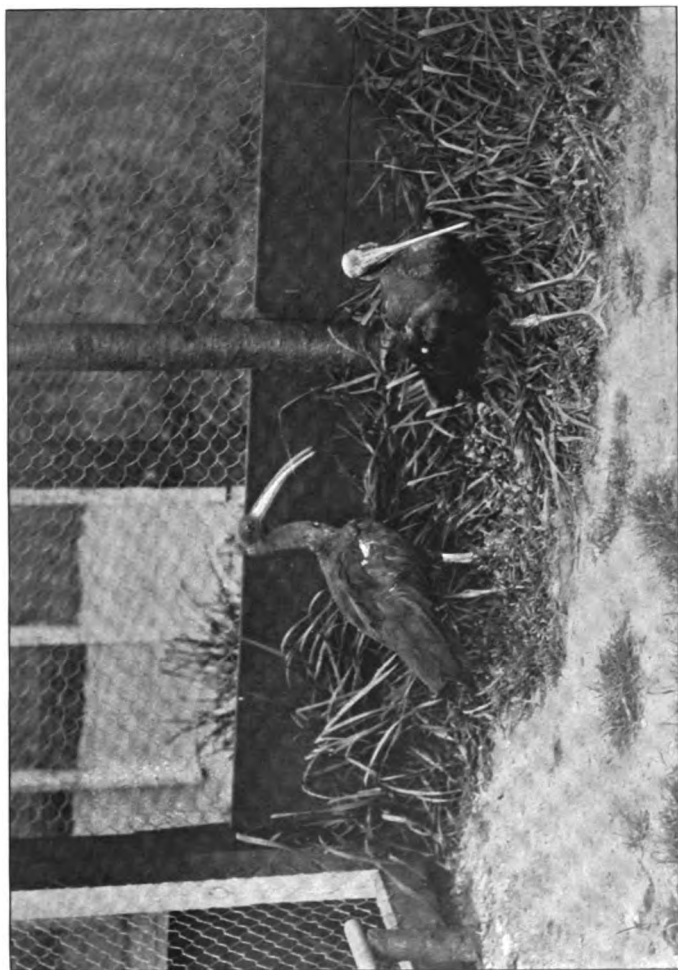


Photo by C. Barnly Smith.

PAIR OF KING IBIS.
Inocotis papillosus.

Baird, Ross and Laurenceau, Ltd.

in the Magazine. I have given Arthur's mixture mixed with potato and carrot to my Tanagers, and this they sometimes eat and sometimes will not touch; but I notice these birds greatly differ in their tastes for food.

I am hoping next year to build an outdoor aviary for Tanagers only. At present in an outdoor aviary with a shelter I have several Gouldians and a pair of Bullfinches, these latter always go to the shelter at night whilst the Gouldians remain out amongst the bushes; this I suppose does not matter, as they choose it of their own will.

A. AITCHISON (F.Z.S.)

The following reply has been sent to Mr. Aitchison:

I never use peat moss litter myself and have no idea where you could get it. I always recommend sea-sand (the sharp sand used by builders) for all kinds of birds: I find that it suits my Tanagers very well, although naturally they make it pretty wet with their daily bath. Would not cocoa-nut fibre answer your purpose?

Although, as a rule, Tanagers eat very little beyond the egg and ants' eggs in an insectivorous mixture, I give mine the same food which I provide for all my insectivorous birds, viz.—two parts crumbled stale household bread, one part powdered biscuit, one part egg (either preserved or hard-boiled and crushed through a masher) and one part Trower's "Improved Cecto" or "Century Food." I also give at this season ripe pear and banana and later ripe orange and banana daily. Occasionally insects in some form are given alive, or, if a bird gets out of condition, one or two spiders. Thus fed I have kept two cock Scarlet Tanagers since 1897 and an Archbishop Tanager since the end of 1903 in perfect condition.

Both Mr. and Mrs. Abrahams have passed into another state of existence, I don't suppose the food is now obtainable.

I think if you were to stick some dense brush-wood in the sheltered part of your aviary, you would find that the Gouldian Finches would prefer that to bushes in the open; mine have always done so.

A. G. BUTLER.

HABITS OF THE CUCKOO.

SIR,—With reference to the interesting article on the Cuckoo, by Mr. Dalglish, in last month's *Avicultural Magazine*, I venture to give you some notes regarding the habits of the Cuckoo which I have observed personally.

Some years ago I collected eggs and consequently was always looking for nests. There was a long hedge which was a favourite nesting place for many small birds, especially Hedge Sparrows and Greenfinches. With regard to Cuckoos sucking eggs, I feel quite certain that it does so. I have seen a Cuckoo flying along this hedge and stopping now and then, and on looking at all the nests in it, in the hope of finding a Cuckoo's egg, I found almost all the eggs, in the various nests, sucked, and as there were no other birds, such as Jays and Magpies, in the neighbourhood which suck

eggs, and no other creature about the place likely to do such a thing I came to the conclusion that it was the Cuckoo which had sucked them.

Another thing one would like to know, and that is how many eggs does a Cuckoo lay? I remember finding four in nests comparatively near one another, exactly alike and, as far as I could judge, laid respectively on the 10th, 16th, 19th and 21st of June. The one found on the 16th was considerably incubated, so it was probably laid a few days earlier. I feel certain that all these were laid by the same bird. These were all in Hedge Sparrows' nests and were brownish-grey in colour. Of course the bird may have laid several more, both before and after.

As to the colour of the Cuckoo's egg resembling that of the foster parent, as far as my experience goes, they very rarely do so. I have found a good many, and none of them resembled the foster parent's egg with the exception of one I found in a Pied Wagtail's nest, most of the others were found in Hedge Sparrow nests and were grey like a Pied Wagtail's or brownish grey. I found one once in a Thrush's nest, another in Chaffinch's nest after the young Chaffinches' had flown, one or two in Robin's nests but not in the least resembling Robin's eggs, and one in a Tree Pipit's nest whose eggs were of the red variety, the Cuckoo's being grey.

I think, as Mr. Dalgleish remarks, the probability is that the Cuckoo could not find any suitable nest and was forced to make use of any one she could find, and in this neighbourhood there never was much choice.

H. JONES (Major).

POST MORTEM EXAMINATIONS.

RULES.

Each bird must be forwarded, as soon after death as possible, carefully packed and postage paid, direct to Mr. ARTHUR GILL, Lanherne, Bexley Heath, Kent, and must be accompanied by a letter containing the fullest particulars of the case, *and a fee of 1/- for each bird.* If a reply by post is required a fee of 2/6 must be enclosed. Domestic poultry, pigeons, and Canaries can only be reported on by post.

BLUE BREASTED WAXBILL. (The Hon. Mary C. Hawke). The bird died of apoplexy.

COCKATIEL. (Miss Drummond). The bird died of concussion of the brain due to direct injury to the skull.

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R. H. PORTER, 7, Princes St., Cavendish Sq.

LONDON, W.

NOTICES TO MEMBERS—(Continued from opposite page).

Two six-foot flight cages, with stand, straight wires half-inch apart, made by cage-maker, light, good condition, 50/- the lot, or will exchange for good hen Violet-eared Waxbill.

PHILLIPPS, 26, Cromwell Grove, Hammersmith.

Advertiser, due home next March, will endeavour to bring Indian birds if suitable offers are received in time to collect them. See advt. in October number. Capt. PERREAU, 4th Gurkas, Bakloh, Punjab, India.

Vols. I., II., III., IV., New Series, *Avicultural Magazine*, bound in art cloth, (new) £4. W. T. CATLEUGH, Clyffe, Richmond Park, Bournemouth.

Varied Lorikeet (*Phlosclera versicolor*) cock bird, in perfect health and plumage, 50/-, or would pay same price for guaranteed hen. Wanted pair Chinese Painted Quails, guaranteed, and pair of Parrot Finches.

W. R. TEMPLE, Ormonde, Datchet, Bucks.

Pair Satin Bower-birds, cock perfect adult plumage, hen little rough, but perfectly healthy, £5; cock Barraband's Parrakeet, perfect adult plumage, £2; adult pair Brush Bronzewing Pigeons, 35/-; young cock Harlequin Quails, 5/- each; Diamond Doves, Yellow-rumped Finches, cock Crimson Finch, hen Bauer's Parrakeet, cock Chinese Quails.

D. SETH-SMITH, 14, Canning Road, Croydon.

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P. F. M. GALLOWAY, Caversham, Reading.

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E. J. BROOK, Hoddon Castle, Ecclefechan.

III.

NOTICES TO MEMBERS—(Continued from page ii. of cover).

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 Mr. ERNEST ARTHUR GRANVILLE BOX; 28, Garfield Road,
 Lavender Hill, S.W.
 Mrs. F. WARREN VERNON; Toddington Manor, Dunstable, Bedfordshire.
 The Honble. VIOLET MILLER; Wilderness, Sevenoaks.

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 Mr. THOMAS CURTIS; 67, Frith Street, Soho Square, W.
Proposed by Dr. BUTLER.
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- Mrs. BARBER to The Villa, Wirton, Nayland, Suffolk.
 Mr. A. E. BOOTHROYD to Ford Street, Southport.

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(Continued on opposite page).

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All MSS. for publication in the Magazine, Books for Review, and Private Advertisements should be addressed to the Editor, *pro tem.*, Dr. A. G. BUTLER, 124, Beckenham Road, Beckenham, Kent.

All Queries respecting Birds (except *post mortem* cases) should be addressed to the Honorary Correspondence Secretary, Dr. A. G. BUTLER, 124, Beckenham Road, Beckenham, Kent.

All other correspondence, and Subscriptions, should be sent to the Honorary Business Secretary, Mr. T. H. NEWMAN, Newlands, Harrowdene Road, Wembley, Middlesex. Any change of address should be at once notified to him.

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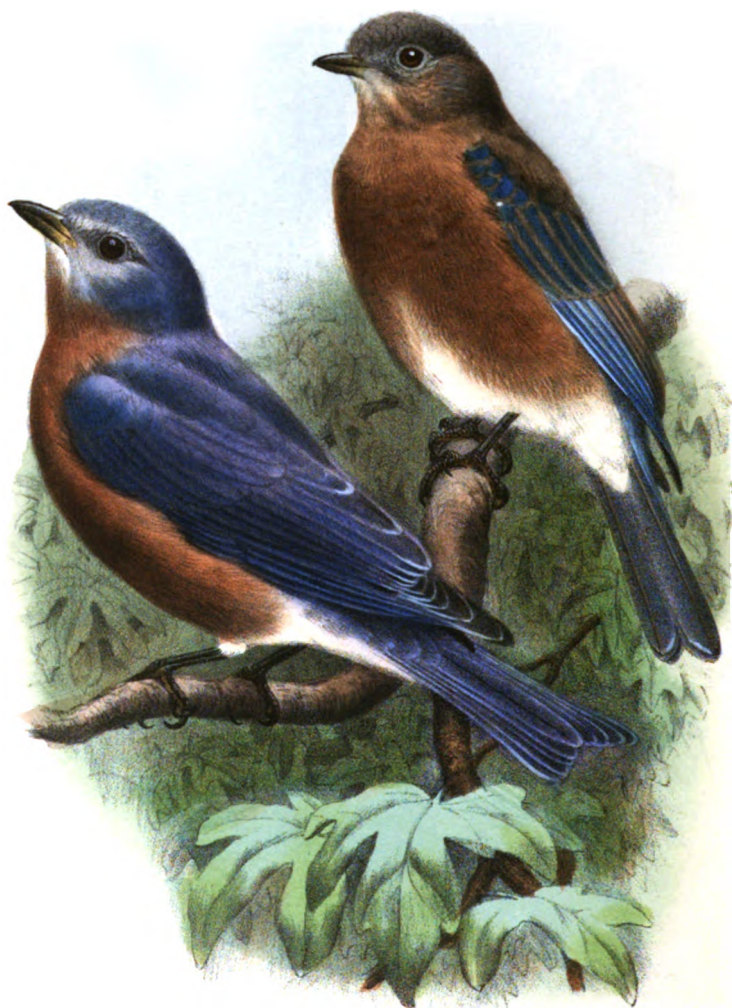
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(Continued on page iii. of cover.)



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THE AMERICAN BLUE-BIRD.
Sialia sialis.

From life

Avicultural Magazine,

BEING THE JOURNAL OF THE

AVICULTURAL SOCIETY.

*New Series—VOL. VI.—No. 2.—All rights reserved.*DECEMBER, 1907.

THE BLUEBIRD.

Sialia sialis (Linn.)

By C. WILLIAM BEEBE,

Curator of Ornithology; New York Zoological Park.

To write an essay on the Bluebird is like attempting to describe the face of a dear friend; it is so familiar, so much of its charm has always been taken for granted, that it is difficult to translate into definite words and phrases. In the north-eastern part of the United States the Bluebird is the true harbinger of spring and its beauty of colour and note, together with its friendly habits and love of human habitations endear it to all lovers of birds wherever it is found. The appearance of the Bluebird, or Blue Robin as it is called by foreign dealers, is too well known to require description. Some one has truly said that from its back it reflects the colour of the sky; from its breast, the earth.

In the latitude of New York City, Bluebirds may be observed every month in the year, but those seen in winter are in silent restless flocks, constantly on the move, ever in search of the half frozen berries which mean life itself at this bleak season. The fruit of the poison ivy, catbrier and bittersweet, and the bluish clusters of the cedar are all eagerly eaten. In the southern states the berries of the mistletoe are a favourite item of the Bluebirds diet.

When the first warm days of early March loosen the icicles and soften the snow, the throat of the Bluebird feels the thawing and the first notes of the season are heard. This familiar call-note has well been named the "violet of sound."

It is a soft sweet warble of two or three syllables, almost impossible to put into words but easy to imitate by whistling.

Soon the winter flocks pass northward but we never miss them for their place is taken by others from the south, and this all but imperceptible shifting migration goes on until one morning we see a pair of Bluebirds flying about the hollow in the old apple tree, and we know that the summer residents have arrived.

The courtship is ardent but quickly over and both sexes begin to carry grasses and feathers to the hollow limb or bird-box selected as a nesting site. The song is far from elaborate, being only variations on the call-note, its charm due to the softness and richness of the mellow tones. With the coming of insect life the Bluebird changes its diet and becomes wholly insectivorous. Its favourite haunt is a more or less open, field-like country with scattered bushes and trees. From the summit of a fence-post or low bush it watches the grass and at intervals flies down, snatches a grasshopper or beetle, and is back again.

If a bird box with a hole in the side is set up on a fence or tree it is almost sure to be occupied by a pair of these birds, except where English Sparrows are numerous. Then the Bluebirds have but small chance, and are usually driven away.

About mid-April the warblings of the male cease—a sign that the bird has a nest near at hand. In June, after the young have flown, a brief second season of song may accompany the rather perfunctory renewal of courtship at this time. Even a third brood is not rare, and with the great mortality due to cats, small boys, the elements and other factors of the environment, three broods are none too many to perpetuate the species. Four to six pale bluish white eggs are laid. The same nesting site is reoccupied year after year by the same birds, when by a stroke of good fortune these survive the perils of the southward migration.

The young birds, as is well-known, clearly reveal their turdine relationship by the spots and mottlings on breast and back. They linger for some time in the vicinity of their home and occasionally a youngster of the first brood, still in his juvenile dress, will help feed the nestlings of the second. This unusual altruism is tolerated but unfortunately neither encouraged nor apparently appreciated by the hard-working parents! When the

second laying of eggs follows immediately after the flight of the first nestlings, the male Blue-bird will often take full charge of the latter, besides now and then carrying food to the female or even taking her place on the eggs.

When the last nestlings of the season are on the wing, the family unites in a loose flock with others, and through the autumn, the restlessness of the coming migration keeps them on the move. Sometimes in the late fall, in October or early November, just before leaving for the south, a pseudo-vernal feeling will inspire the parents, and, for a few days, the male will warble sweetly and both will assiduously carry material into the nesting box. This unseasonal effort is soon cut short by a cold wintry blast from the north.

Although so gentle in notes and disposition, Bluebirds do not tolerate too close companionship at the nesting season, and each breeding pair often have a kind of preserve, perhaps of an acre or more extent, over which they exercise proprietorship. They seldom wander or feed outside their imaginary boundary lines. The same seems to be true in a measure of Bluebirds in captivity. At one time last spring I had seventeen pairs, mostly cage-reared birds, hard at work building nests, but only where the number in each flying cage was confined to one or two pairs, did the attempts succeed. Bluebirds nest very readily in confinement and rear their young without trouble. They are so familiar about the door-yards and orchards that they are never caged, and were not even before the present laws prohibited the keeping of them in captivity.

I will give one example of many unusual nesting sites chosen by these birds. A number of years ago, in Reading, Massachusetts, a pair of Bluebirds built their nest in one of the signal balls near the railroad station. Here they successfully raised two broods of young, in spite of the fact that the ball was lowered fifty times a day for passing trains. Every time it descended, the parents flew out and waited, perching near by or flying about impatiently, until the ball was raised again, when they immediately returned to sit on the eggs or cover the young as the case might be.

Our Eastern Bluebird ranges from Nova Scotia and

Manitoba on the north to Florida and Texas in the south, and west to the Rocky Mountains. As in the case of so many other groups of birds, the varied environment of climate and altitude in the far west and in Mexico have produced physical changes in the Bluebirds of those regions. The last haul of the fine-meshed taxonomic net of our systematist reveals two sub-species of our Eastern Bluebird, five forms of the western Mexican Bluebird (differing chiefly in the transposition of blue and chestnut on throat and back), and, most beautiful of all, the specifically distinct Mountain Bluebird, almost wholly blue in colour—cærulean above, pale lavender beneath.

THE BLUEBIRD IN CAPTIVITY.

(*Sialia sialis*).

By Dr. A. G. BUTLER.

It would be difficult to say much about the life of this bird in captivity which has not already been said ; but, for the sake of those who have not had the pleasure of keeping and breeding it and who may, perchance, not have read the various published accounts of its aviary life, a brief description of my experience of the species may not come amiss.

I purchased my pair of birds, I think, about 1889, from the late Mr. Abrahams, and turned them into the lighter of my two bird-room aviaries, where they behaved quite amiably towards the other inhabitants until June 1890 when courting commenced. This was carried on in the usual manner, the male bird flying up to the female with a piece of egg or a living insect in his bill and feeding her with it, uttering at the same time a soft barely audible whistle.

Pairing was a very noisy affair on the part of the male bird, and the manner in which he distorted his whole body was extraordinary. I would refer those of our members who have not seen it to Mr. W. R. O. Grant's faithful representation of the courting attitude of *Erithacus rubecula*.* In this drawing the neck is stretched, the bill pointed upwards, but tail thrown

* *Ibis*, 1902, Vol. II., page 678.

forward, an attitude exactly reproduced by our Blackbird before pairing. In the case of the Bluebird the bird stands in a perfectly perpendicular position, the neck stretched, bill pointed upwards, but tail downwards close to the legs which are stretched quite straight, an exaggeration of the posture of a Heron when hiding in the reeds. This posture, accompanied by shrill shrieking, commenced about half-an-hour before pairing took place and was continued for quite ten minutes afterwards.

All my nests were formed in the cigar-nest-box (see "Hints on Cage-birds" p. 41) of coarse hay with a neatly formed but shallow cup for the reception of the eggs; having plenty of materials the nests were usually completed in one day. The number of eggs deposited varied from three to five of a dull blue colour somewhat similar to that of the eggs of our Wheatear, but shaped like our Robin's eggs, only smaller. The small size of the eggs is indeed somewhat surprising when compared with the bulk of the bird that lays them.

Incubation lasted thirteen days and the hen came off the nest repeatedly, that is to say whenever the male bird brought her a delicacy; she never fed in the nest but always left the eggs to eat; nevertheless in almost every instance all the eggs were hatched, so that, if I had been living in a good country for grasshoppers I should have probably reared quite a colony of Bluebirds; but that is the trouble with this and many other insectivorous birds, they will insist upon living insects or spiders as food for their young. The Bluebirds did indeed give a little yolk of egg and a few small earthworms when nothing else was available; but, unless plenty of insects or spiders were added all the young died. Thus it came to pass that from my first nest of three, only one young one was reared; and afterwards although, up to the end of 1903, I had as many as three nests in a year, not one young one lived to leave the nest, some died in two or three days, some when half grown and one or two almost full-feathered. I was taking holidays at home when my first birds were hatched, and therefore was able to spend the whole day in ransacking my own and neighbours' greenhouses for spiders, but afterwards I was compelled to supply living food morning and evening, leaving a saucer of earth well stocked

with small earthworms for the birds to feed with, and these were insufficient for their needs.

I noticed that, when giving insects of a dry nature like house-flies, moths, or butterflies, the Bluebirds invariably swallowed and regurgitated them several times before offering to the young; spiders or cockroaches were broken up, the bodies swallowed once or twice and the legs subsequently eaten by the parents; apparently caterpillars and chrysalides were smashed, swallowed once and then regurgitated into the mouth of the young. I never saw insects given alive, as captured.

According to A. Hermann (*Vide Russ, "Fremdl. Stubenv."* Vol. II., p. 309) the young leave the nest when 16 to 18 days old and feed themselves 14 days later, but my bird did not leave the nest until 23 days old and could then flutter about fairly strongly; he was perfectly able to feed himself from eight to ten days later and his parents insisted upon his doing so. Later in the year, the Bluebirds having become somewhat aggressive towards other birds in the bird-room, I transferred them to a covered aviary which was then open on one side to the open air; here the young bird acquired his adult plumage, but of course not the full adult size of his parents; later in the year he caught a severe cold and died; when opened the liver and spleen were seen to be freely studded with miliary nodules. The following year I gave my Bluebirds a small aviary, almost to themselves, their only companion being a Red-vented Bulbul; later I had to remove this bird as he insisted upon feeding the young Bluebirds and viciously attacked their father.

The nestling plumage of the young is much more ashy than the mother bird and the breast is distinctly spotted, so that Dr. Russ' statement that "the young plumage is altogether different from that of the old birds" is justified. On acquiring its adult colouring the young male bird resembles its father, but its bill still remains broader than that of its mother.

In an outdoor aviary I should expect to be able to breed Blue-birds without much difficulty; they would then be able to supplement the food which I could supply by the insects which they would themselves capture and the earthworms and other crawling things which they would dig out of the earth, but to provide for them in an indoor aviary is heartbreaking work.

My old birds both died in 1899, having been in my possession about ten years ; they were about as pleasing as any birds I ever possessed, utterly fearless, ready at all times to fly down and take dainties from one's fingers and showing very little anxiety even when one looked into their nest and examined their young ; indeed with one of my nests I tried to help the parents by dropping egg-food into the mouths of the youngsters ; the cock bird flew down to see what I was about, uttered his soft call note, and then flew away apparently quite satisfied that I was doing no harm to his family. I believe that, when bird-owners warn one never to approach a nest with young lest the parents desert them, it is often true as regards those particular bird-owners ; but it is a known fact that with some of us our feathered friends are far more trustful, they instinctively feel that we shall not hurt them and they soon cease to be at all alarmed. I have had so many tame birds in my time that I feel sure that I can safely run risks which many breeders would not venture upon. I have more than once had birds tame enough to eat from my fingers three days after their capture, and I do not think there are many aviculturists who could say that excepting perhaps in the case of the English Robin, which, in its wild state, has been known to take meal-worms from the fingers. I have not tried this in the open garden, but I have with a newly caught Robin in an aviary, which hopped up with the greatest assurance and snatched the grub out of my fingers.

RED-CRESTED CARDINALS AT WOBURN.

The DUCHESS of BEDFORD writes :—

“ A year ago we turned a lot of Red-crested Cardinals out and a few came to feed on my bird trays throughout the winter.

“ They nested in the tops of the Cedar trees in the garden and brought up one family, a second being destroyed by Jackdaws.

“ We turned out more this summer, but a second lot arrived so late in the autumn that we decided to keep them through the winter in an outdoor aviary.

“ Both the Red-crested Cardinals and Saffron Finches survived the winter at large in the garden.”

FEMALE REGENT BIRD ASSUMING MALE'S PLUMAGE.

As may be seen on reference to our December number for 1905, pp. 58-9 of vol. IV of our New Series, in January, 1903, certain Regent Birds, *Sericulus melinnus*, came into my hands.

The particular Regent about *which*—alas, I can no longer venture to say *whom*—I now propose to write was referred to by me in Nos. 2, 3, and 4 of vol. IV as “a smaller and very flighty creature” (p. 63), “eccentric second female” (p. 64, note), and generally as the second or odd female. At pp. 63-4 I mentioned how, during the spring of 1905, the male had paid court to her, how they had been shut up together for nesting purposes, and how, on May 18, she had been frightened into a fit by a Long-tailed Whydah and had had to be removed; how (pp. 66-7), later in the season, the male had again made up to her but breeding had been stopped by the increasing cold of the advancing winter. And, once more, last March, at p. 142, I mentioned how the young male had courted her, and had died prematurely after a fit on February 15-16.

This bird, it may be perceived, had suffered various disappointments; and the sudden death of the young male must have given her a grievous shock; and it is hardly to be wondered at that her health suffered materially.

For some time she was dull and listless. During May she became exceedingly restless, both by night and day, and seemed to be filled with a desire to be off and away after a mate. During June I became aware that the bill had changed its colour to a decided yellow. During June—July, four flights were cast, the herald of approaching moult. On July 26, I had occasion to handle her, and found that the two new primaries on each wing which were replacing the cast feathers were black-and-yellow—and then the bitter truth flashed upon me, the bird was assuming the plumage of the adult male!

This female Regent is now (mid-October) in the plumage of the fully adult male, not a feather of the female dress remaining; the yellow shield on either wing shews a few black streaks, which mark the course of the black heads of some flights as they push their way forward but have not yet come fully into line

with their fellows, but practically the plumage is complete. The only external differences between it and a true male are that the bill, although yellow, and at one time bright yellow, is now not nearly so clear and bright as a male's should be, and that the yellow of the head does not show so much of the rich red-orange that makes the colouring of a good male so attractive; the eyes, too, are comparatively but of a feeble yellow.

It is rarely that one has opportunity of noticing the precise course followed by moult over the body of a bird; and a few brief notes on this point may not be out of place. It must be remembered that in this case every feather, the large and the small, has been replaced by a feather of a totally different colour, so that the appearance and growth of every new feather could be detected and watched. In the spring, it was a "gaudy buff and brown" bird, now its colour is "sober black and yellow." For the sake of brevity, I shall refer to the old plumage just as buff or brown.

The first change of colour appeared among the flights; and a few of these, as already stated, are still not quite fully grown, the last of the old plumage, a secondary, not having been shed until October 12. Year after year, I have observed how a primary or two would be dropped by the Regents quite early in the summer, long before there was any appearance of moult, and how the flights would continue to be shed, practically in pairs, right up to the verge of winter. Possibly our cold climate may be in part responsible for this; but, personally, I regard it rather as one of those beautiful provisions of what we materialistic heathen of the present day call "nature" (with a small "n") which enables a shy and timid creature with many enemies to retain its powers of flight unimpaired all through the moult.

As regards the body feathers generally, including the wing-coverts, the black first appeared on either side of the chest, and was immediately followed—possibly accompanied—by some on the lower back, or around the root of the tail. From these three centres the black gradually extended; not in any instance did a black feather crop up at random—each spot spread as a sore. By August 17, there was quite a large patch of black on each side of the breast, and another on the back; one black feather was

appearing in the centre of the tail ; and the eyes were yellowish. By September 2, the two breast patches had joined just below the chin (which was black), but all down the centre of the under side there remained a dividing line of buff ; and more black feathers were to be seen in the tail. On September 9, only a tiny touch of the buff, in the centre of the chest, remained on the actual body, and every brown feather had disappeared from the tail, which now, however, although wholly black, was far from being fully grown ; the cheeks, &c., were still buff. On September 14, the body was entirely black ; a little buff remained on the sides of the face and neck ; the former had disappeared by the 17th. The last of the old feathers (excluding flights) clung in a little patch on to each side of the neck ; and it was not until September 25 that the plumage of body, head, and neck could be pronounced to be complete. The tail was full-grown by October 7, but the flights were not so until some considerable time later.

There was one curious phase in the course of this change of feather, one of more than passing interest to those who think.

By the way, but in this connection, why should the feathers of a bird be often of one colour on one part and of a totally different colour on another bordering upon it, no actual dividing line existing between the two colours, although the nominal line of demarcation between them is clearly and sharply drawn ? and why should this distinction be continued and maintained through countless generations without deviating by a hair's breadth, and such a patch in the male (of species that have the sexes nominally alike), sometimes, be a trifle longer or larger or something than the corresponding patch in the female ? We need not go farther afield for an illustration than a good living example of the common Java Sparrow. What can be more definitely and precisely defined than that white patch on each side of the head ! Why should this patch remain the same, without encroaching or being encroached upon, moult after moult, generation after generation, in countless thousands of specimens ! Of course I am referring to healthy natural birds, not those that have been tampered with by man. And so the Regent. The adult male has a broad irregular band of orange-yellow running from the base of the upper mandible over forehead, crown, nape, and hind-neck to the mantle,

which proves an insurmountable obstacle (but why?) to the flow of the golden stream. At this point, the latter surges up, prevails over and overflows the upper part of the sable barrier, then, beaten back, runs off to right and left, forming a half-collar. From time immemorial, the glorious light has been waging fierce war here against the pitchy blackness of the mantle, but has not advanced by the breadth of a line. The gold impinges upon the black which everywhere hedges it in, and comes just down to such and such a point, but not one jot or one tittle beyond. A spike or prong of yellow projects into the black behind the eye, and seems to be just on the point of making an inroad,—but when has it been otherwise, and when is it going to make any progress? Just so far shalt thou go and no farther is the decree, and we can only accept it and wonder. This irregular “shape” of yellow grows absolutely true to type about the head and neck of every adult male Regent, year after year and generation after generation. One *result* of this beneficial decree I referred to in December, 1905 (pp. 55-6), and it makes us marvel the more. The golden glory appears only on the upper parts; and the courting male knows full well how to shew it off to the best advantage. But the same bird, when hiding from an enemy, has only to squat on a high perch and expose the sombre underparts to the foe, and he remains invisible, for not the tiniest streak of tell-tale yellow has been permitted to grow where its brightness might endanger the safety of the wearer.

And now comes in the curious little episode in connection with my suffragette.

Up to and including August 18, the entire head and neck all round was that of the female Regent—not an old feather had been lost, not a new one had been gained. But, on the following morning, a startling change was apparent, and most conspicuously so. My first impression was that the bird had met with an accident during the night and had scalped itself, but closer inspection shewed that nothing of that kind had occurred. The broad track of feathers referred to above, from bill to mantle, was bare of feathers, not so much as the ghost of a feather remained. The entire patch, but that only, which in the adult male is yellow, had lost every feather, and was there all ready for the yellow feathers

to grow; and on the very next day the crown region was tinged with the glorious yellow-orange, which in due time filled up and occupied its allotted space. But of the feathers which bordered the track, not so much as one had been shed; these buff feathers reared their heads conspicuously aloft, like the high grass on each side of many an African path, and were only slowly and gradually replaced by the black feathers, some of the buff remaining on the cheeks as late as September 14, and not being reported clear until the 17th. Why should this block of tiny buff feathers from one particular part be cast all together, to make way for a crop of yellow ones, while all along, on each side of the track, feathers of a like size and colour, separated from them by no visible dividing line, held their ground well, and only slowly, and as it were reluctantly, gave way to the on-coming growth of black? It is something more than passing strange.

Another point must be noticed. Whereas the normal male Regent takes not less than two annual moults to change from the immature to the adult plumage, this nondescript creature has jumped from the old feather to the new by one single moult.

Small blame to them, then, that the members of my household, accustomed for years to seeing this female going about in sober and modest apparel, on now beholding a gaudy damsel flouncing and bouncing about, should mutter such words as "unnatural," "weird," "uncanny," "false," "brazen faced hussy," and the like. It is a Jackdaw in Peacock's feathers, a wolf in sheep's clothing. It is not a male, nor a female, but a "thing"; it is not a he, nor a she, but an "it"; it is neither fish, flesh, fowl, nor good red herring. Alas, my masters, what is to be done with this abnormal monstrosity!

REGINALD PHILLIPPS.

N.B.—As I see this bird, day after day, flying about to all appearances a true male, it is natural to ask—Can any mistake have been made? The only possible one that I can suggest is that the bird who died last February was the second female, and that it is the young aviary-bred male who survives. When the shadow of death falls on a bird, it is a very different creature from what the same bird was when full of life and vigour—but *the survivor seemed to be certainly the well-known female.* More-

over, the gentleman who kindly made the *post mortem* examination of the deceased wrote me that it was a male. And, regard the case as we will, we cannot escape from the fact that the bird passed from the one plumage to the other by a single moult. The more I consider the *pros* and *cons*, it seems to me that my view meets the difficulties of the case better than any other, even regardless of my long acquaintance with the second female.—R.P.—Nov. 8.

THE BLACK COCKATOO.

In the June number of the *Avicultural Magazine*, I noticed a quotation from *The Emu* to the effect that the Black Cockatoo "had shredded the bark off the dead eucalyptus and that it was noted that only dead trees were worked upon." I think that the above might convey a wrong impression as to the habits of these birds. They certainly do attack the "stringy bark" in the way shown in the photo in *The Emu*, but they also treat living trees in the same manner. I may say that I have seen hundreds of living trees, which presented the same appearance except that the bole only of the tree was attacked. These birds are very fond of the larvæ of a large moth, the grubs, which are three or four inches long and about one inch in diameter, eat their way into the Wattle Trees, and the Cockatoos tear large pieces of the bark and wood off the trees in their endeavour to obtain these titbits; these trees are invariably alive, I doubt whether the Black Cockatoo even with the great power of their bills could get one of these grubs out of a dead wattle tree.

It might interest members to know something of the nesting habits of these birds. They build in the hole of a lofty eucalyptus tree, generally between 80 and 150 feet from the ground, making no nest to speak of, pulverising the rotten wood to the depth of half an inch or so at the bottom of the hole, the eggs being generally placed about two feet from the outlet. I have a pair of eggs before me as I write, they were taken six years ago in the Midlands by a shepherd, they are dull white, in shape oval, and measure (1) 1·90 by 1·40 (2) 1·91 by 1·26. The

eggs are considered rare and I only know of three or four sets being taken in Tasmania. I have never seen a Black Cockatoo in captivity, and do not know how they would manage, without their usual diet.

I have found only two nests during a period of thirty years and, strange to say, both were on the slopes of Mt. Wellington, within 8 or 9 miles of Hobart; though of course in secluded gullies and out of the tract of the ordinary run of mankind or even school boys. One of these nests contained two young ones when found in February, and in the other the birds were sitting late in December; on visiting the former nest about a week later the two young birds were observed, the parents still feeding them and they still retained a fair amount of black down on the back and breast, the following week they had disappeared, most probably having retired to the highlands round the Southern end of Mt. Wellington.

I hope that these few notes will be of some interest to members as I am afraid that it will be many years before any one succeeds in keeping these birds in captivity, much less in rearing the young.

A. L. BUTLER.

Hobart, Tasmania,

Sept. 23rd, 1907.

AVICULTURAL NOTES FOR 1907.

By ARTHUR G. BUTLER, Ph. D.

My article published in the August issue of our Magazine brought my notes on the present year's experiences up to July 4th, at which date I had not reared a single bird in any of my aviaries, although I had heard one young Cockatiel being fed and a pair of Tambourine Doves had left the nest and been starved to death by their parents.

On the 12th I saw my Diamond Doves feeding young, one of which left the nest on the 15th and was reared. My Satin Bower-bird was taken ill on the 12th and died in the middle of the day following. I sent it to be skinned and a *post mortem* examination proved it to be a cock bird, thus partly confirming Mr. Le Souëf's statement as to the cocks dying within a year or

two after assuming the adult plumage, but at the same time revealing a very curious fact in relation to this species:—

Briefly to review the history of my two Bower-birds, I may note that the supposed pair (palpably in nestling plumage, both small and with indications of pale spots on the green plumage), came into my possession in September, 1899, and at the end of a year one had assumed the adult plumage of the male, the other the adult plumage of the female. Naturally I concluded that I had secured an undoubted pair, although both sang and danced; and though they certainly quarrelled, that fact in no way disturbed my faith, because from my boyhood I had been taught that “the quarrels of lovers are the beginning of love.”

When in July, 1904, the supposed hen began to assume male plumage and became so spiteful that I had to remove the undoubted cock, I concluded, as a matter of course, that disease of the ovary was affecting her plumage (see my short paper in the “Annals and Magazine of Natural History,” ser. 7, Vol. XVI., pp. 350-351). Later the perfect male plumage was acquired and retained permanently, and exactly three years later the bird died and proved to be a cock.

Why some cock birds should assume male plumage at the end of the second year, and others should disport themselves in female attire for six years or longer, is a problem which requires a good deal of explanation. My birds were only two out of half-a-dozen or more, all palpably young birds, imported in one batch.

On the 15th, I lost a Yellowish-finch, which, from its bright plumage, not I only but other aviculturists had decided to be a cock bird; it had built a nest in conjunction with a duller bird in the same aviary, but no eggs had been laid; examination after death proved it to be a hen with well-developed ovary; so that bright colouring in this case probably indicated advanced age and not sex; it is a rather large bird.

On the same day, the first young Diamond Dove having left the nest, the mother laid an egg on the ground; and the second egg laid on the 16th fell out of the nest and was smashed. The cock fed the young bird until he could look after himself. On the 25th one young Cockatiel flew; it insisted upon its

parents feeding it for a month afterwards, and proved to be a cock.

August 8th I again saw a young Tambourine Dove on the floor of the aviary, which fluttered away just above the ground as I approached it. This bird was reared and became so extremely wild that it was a marvel to me that it did not break its neck. Directly I opened the aviary door it would fly at full speed straight for the wire netting and get hurled back head over heels with the force of the impact. I keep it in a cage now to calm its fears. The other bird from the same nest died soon after leaving the nest, and when I found it the flies had been at it. On the 12th I saw a hen Gouldian Finch peering into a nesting-receptacle and hoped that my Pintail Nonpareils had gone to nest. It was a vain hope, for though they often examined several receptacles and I left them outside until nearly the end of October, they did nothing.

In this month the Diamond Doves went to nest for the fourth time, two young leaving it on the 30th; both were reared. The parents laid again on September 21st and 22nd, but broke both eggs and gave up breeding on October 9th.

On September 28th I again saw a young Tambourine Dove on the floor, and on the 30th I saw the pair together, but on October 2nd the smaller bird (probably the hen) had disappeared, and I saw it no more; the other seemed to get on well for a time in spite of heavy rains, but on the 9th I found it cramped and unable to walk. As it could feed itself I took it indoors and caged it, putting it into a box of hay every evening; it partly recovered and lived until the 23rd. The quills and tail-feathers attained almost to their full length, but the sheaths were not shed. Then I found it dead. Thus of six young Tambourine Doves which left the nest this year only one was reared.

During September my pale form of Hangnest *Icterus vulgaris* (*limoneus*) moulted and bore out my statement that the colouring of these birds when properly treated tends to deepen in captivity. In fact it is now more deeply coloured than my old bird, which moulted in October, but is still distinguished by its more slender build, the small triangular naked patch behind the eye in place of an orbital ellipse round the eye and the white

edges to the outer webs of the external tail feathers. Of course the difference in song continues. As I rejected some of these characters on the ground that some of the deeper-coloured birds possessed them, the question now arises as to whether, after all, they may not be of importance. The change of colour from pale to dark, certainly seems to render the validity of *I. curasoensis* as a sub-species somewhat doubtful.

On the 27th I brought indoors the birds in my small outdoor aviary, but left those in the larger aviary outside. Two hen Weavers died during the year in consequence of damp and cold fogs, but they were old birds which had been kept indoors for many years.

On October 30th I received a pair of young Chingolo Song-Sparrows, very kindly presented to me by their breeder, Mr. W. E. Teschemaker.

The fact that reliance upon colour characters alone caused me to sex incorrectly both a Bower Bird and Yellowish-finch, clearly evidences the importance of studying the external structural differences in the sexes of birds. No doubt a comparison of the beaks of undoubted sexes of *Ptilonorhynchus* would reveal differences of outline. In *Sycalis arvensis* on the other hand the beaks differ very slightly, not sufficiently to be of any value in deciding the sex. A cock bird which I lost in 1905 is a large and dull-coloured bird, but one which died in 1901 was a trifle brighter, much smaller, and has the front margin of the wing towards the shoulder bright yellow; the female which died in July shows an indication of this yellow edging but is a slightly larger bird than the cock and with more yellow on abdomen and thighs; whereas the chin of the cock bird is yellow, in the hen it shows an orange tinge. The large male would be typical *S. arvensis* and the small brighter pair *S. minor* only the male of the latter came home in an Argentine collection, probably obtained at Buenos Ayres. Both of the smaller birds have paler lower mandibles than the larger bird. I must confess that, with the exception of *S. luteiventris*, in which the outer tail-feather is obliquely marked with white, I have little faith in the validity of the sub-species of *S. arvensis*, knowing as I do how enormously *S. flaveola* varies in colouring at different ages.

So long as it can be proved that a certain type is constant to locality, and not connected by intergrades with any other, I have no objection to it being regarded as sub-specifically distinct, though I should prefer to call it a distinct species; but when, as is admitted to be the case in many of the so-called sub-species recognised in the United States, the greater number of the named forms grade into each other and require to be arbitrarily fixed by geographical boundaries, no difference being discernible, the whole thing ceases to be scientific and resolves itself into a sport no more elevating than that indulged in by children, when they sort marbles by size and colour, in both cases no doubt it educates the eye, and that is all that can be said in its favour. The old system in which a species was described as "widely distributed, becoming larger and brighter towards the westward extremity of its range," answered every scientific purpose without cumbering the ground with useless multitudinous names, and adding greatly to the labours of the museum student and cataloguer.

NOTES ON AVICULTURE IN GEORGETOWN, DEMERARA.

By E. WILLIAM HARPER, F.Z.S.

(Continued from page 38).

The Tanagers or "sackies" naturally on account of their beauty alone claim many admirers. Those most commonly caged are the Blue (*T. episcopus*); the Palm or "brown sackie" (*T. palmarum*); and the Violet or "yellow-bellied canary" (*Euphonia violacea*). Others less common are the tiny Pigmy (*E. minuta*), first introduced into England by Captain Pam, and differing from *violacea* in its smaller size and by having a purplish-black throat instead of a yellow one; the Maroon or "cashew sackie" (*Ramphocœlus jacapa*), with its Chaffinch-like cry of "fink, fink"; the Magpie or "French sackie" (*Cissopis leveriana*); the Black; the Great Saltator or "tom-pitcher" (*Saltator magnus*), in which birds of the year have the eye-brow streak yellowish green, changing later to white; the Blue-and-Black (*Calliste brasilensis*);

the Yellow-bellied or "goldfinch" (*C. flaviventris*); and the Black-cheeked or "buck-tongue sackie" (*C. cyanea*). The last-named is a very quarrelsome species: the hens are continually "swearing" at each other; while the cocks lock themselves together with beak and claw, rolling on the floor of a cage in a murderous embrace.

Generally speaking, no food but fruit is given to Tanagers; consequently those species which are largely insectivorous do not thrive. This fruit diet is, however, an improvement upon the universal pea-meal paste or "satoo," which is used in the East. I regret to state that water is not in many cases given to frugivorous birds; but on account of the succulent nature of the fruit, they do not seem to mind the abstinence.

Of Sugar-birds, the following species are occasionally kept: The beautiful Yellow-winged (*Cæreba cayana*), and the Black-headed (*Chlorophanes spiza*); and I secured the only pair I ever saw of the tiny Yellow-breasted, or "kiskadee sackie" (*Certhiola chloropygia*). Two of my Yellow-winged Sugar-birds were captured at the top of the Demerara light-house shortly after midnight, on two different occasions. What the birds were doing out at such a demoralizing hour I can't imagine—unless they were merely migrating. Young males of this species are green like the adult females; and old males lose their gay colour at certain seasons. Some descriptions of this bird give the colour of the legs and feet as "ruddy flesh-colour." This has evidently been taken from a faded skin; the legs and feet in life being bright coral-red.

I was extremely astonished on one occasion to be told that a man had a pair of "Nightingales" for sale; and, upon expressing a wish to see them, welcomed instead a pair of Red-whiskered Bulbuls! They had just arrived on a coolie-ship from Calcutta, and, in spite of their long voyage of about three months, were in perfect condition. I only saw one pair of Red-crested Cardinals (*Paroaria cucullata*).

Humming-birds were never successfully kept; but, as they were sometimes caged, perhaps they ought to be mentioned. Upon a diet of sugar and water, they can exist for varying periods up to about seven weeks. At times they were offered for sale

freshly-caught, tied by one leg to a piece of cotton a yard or two in length; the poor bird hovering and "humming" at the full extent of its tether, reminding one of a boy's tiny kite. They were captured by hand inside houses, into which they had darted, and were also "limed."

The family *Icteridæ*, with which the colony abounds—taking the place of the Starlings of the Old World—contains a few favourite cage-birds. The commonest is the Cow-bird (*Molothrus atronitens*) called locally the "corn-bird," "rice-bird," and "lazy-bird": the last mentioned name is derived from its Cuckoo-like parasitic habit of laying its eggs in other birds' nests; its host being the tiny Wren or "god-bird" (*Troglodytes fulvus*). The male Cow-birds sing fairly well, often to the accompaniment of much wing-flapping. They have the babbler-like habit of holding down the head in front of another bird in an inviting attitude, implying that they wish to be tickled; at the same time raising the feathers of the head and neck.

The Black Hangnest (*Cassidix orizivora*) sometimes seen, is like a large edition of the Cow-bird, both in its glossy black plumage and in its habits. It, too, is parasitic; its hosts being the Crested Hangnest or black "bunyah" (*Ostinops decumanus*), the Green "bunyah" (*O. viridis*), the Yellow-backed Hangnest (*Cassicus persicus*), and the Red-backed Hangnest (*Cassicus affinis*)—the two last-mentioned species are known locally as "Mocking-birds." All four of the Black Hangnest's hosts make long purse-shaped nests, and are occasionally met with in captivity; but their comparatively large size somewhat handicaps their popularity.

At certain seasons, dozens of Yellow-headed Troupials, or "Yellow-headed Corn-birds" as they are called (*Xanthocephalus icterocephalus*) are offered for sale; but, as they are fed on grain only—paddy-rice and oats—they do not long survive. The Red-breasted Marsh-bird (*Leistes guianensis*), the local "robin," has a correspondingly short life in captivity for the same reason; whilst the Golden Hangnest or "yellow plantain-bird" (*Icterus xanthornis*) dies in even less time by being fed upon nothing but plantain, a kind of banana. One of the most expensive of the colony's cage-birds is a beautiful orange and black Hangnest (*I. croconotus*),

which is brought down to the coast from the borders of the Brazils and known as the "Troupial." The Yellow-crowned Troupial or "Cadoorie" (*I. chryscephalus*) is a great favourite, being prized for its song. When travelling in the interior, up the river Demerara, I learnt from the aborigines that they rear the "Cadoorie" and other insectivorous birds upon river-fish. It is first roasted and then chewed before being given to the young birds. Unfortunately, when the birds are taken down to the coast and pass into other hands, they are soon killed through being improperly fed. I have often seen slices of raw meat an inch long in their cages, with which to supplement their ordinary diet of sour bread-and-milk.

The last of the Icteridine family to be noticed is the Black Troupial (*Quiscalus lugubris*), or colonial "Blackbird." It appears to be an almost omnivorous feeder; in Barbados, where I spent three days on the voyage home, I saw it turning over horse-dung in the streets, searching for grain. It is protected by law in that island, and is the commonest town bird there.

The only species of the beautiful family *Cotingidæ* which I saw in captivity during the three years I was in Demerara, was a single specimen of the lovely Cock-of-the-Rock (*Rupicola crocea*)—a young hand-reared bird in black baby plumage. The chief adornment of the adult, the cinnamon crest, was little more than a slight ridge of dark feathers on the crown of the young bird. Its mode of progression was by hopping, not walking. I was informed that about twenty years ago two or three dozens of these handsome birds were on the market at one time; but since then only two or three specimens had been seen in town.

I tried hard to induce the dealers and aborigines to procure for me some of the other beautiful Contingas—the Purple-breasted, Purple-throated, Crimson, Crimson-breasted, Crimson-throated, Pompadour, etc., which are all found in the interior—but without success. I only hope that some or all of these beautiful species may eventually find their way to English aviaries.

For the correct identification of the only Thrush (*Turdus murinus*) I saw caged, I am indebted to our esteemed member, Mr. H. D. Astley.

Doves are not held in much esteem in Demerara. The

common Barbary Dove (*Turtur risorius*), the Talpacoti Ground-Dove (*Chamæpelis talpacoti*), the Dwarf Ground-Dove (*C. griseola*) and the Red Under-winged Dove (*Leptoptila griseola*) are all occasionally to be seen.

The Tinamous or "maams" are more sought after for culinary, than avicultural, purposes; and the natives were much interested to learn of their polyandrous habits—discovered first, I believe, by our worthy Editor. Their eggs have been brought to me for sale on two or three occasions. The Brown Tinamou (*Crypturus cinereus*) is the only species I saw in confinement; it used to utter its shrill cry about four o'clock in the morning.

Coming next to the Cracidæ, the following must be mentioned: the Crested Curasow or "powis" (*Crax elector*); the Marail Guan or "marudi" (*Penelope marail*); the Piping Guan or "white-headed marudi" (*Pipilo cumanensis*); and the Little Guan (*Ortalis motmot*) or "hanaqua"—so-called from its cry which consists of the word "han-a-qua," repeated several times in a loud voice. All the birds of this family met with in confinement are hand-reared by the aborigines, and are consequently very tame. A Little Guan which was given to me was so tame that it was allowed complete liberty; it fed with the poultry, and roosted at night overhead in the trees. It resented the intrusion of strange fowls, and would fight fiercely with cocks much bigger than itself; but they were seldom able to strike a blow, because their smaller and more agile adversary would fly high in the air above their heads. This bird had a bad habit of sneaking into the house and eating condensed milk, butter, fruit, or anything tasty; although it shared in the fowls' *ménu*. It had full use of its wings, and would sometimes be absent for two or three days at a time.

A tame Trumpeter Bird (*Psophia crepitans*) can sometimes be seen walking in its stately fashion along a quiet street. That extraordinary bird, the Hoatzin, I was unable to obtain; although it is common in the adjoining county of Berbice. Its local name is the "Cangë Pheasant."

The Martinique Gallinule (*Porphyriola martinica*) and the Spur-wing (*Jacana jacana*) were both brought to me for sale: they thrive on a diet of soaked paddy rice and shrimps.

With a brief allusion to some of the Ducks of Georgetown, these notes—which have already reached a greater length than I had intended—must close. The Muscovy Duck (*Cairina moschata*), indigenous to the colony, is domesticated; and breeds freely with the common duck. Two other species of ducks are often seen in a state of semi-domestication—being reared from the eggs of wild birds—namely, the Guiana Tree-duck or “vicissi” (*Dendrocygna discolor*); and the Blue-winged Teal (*Querquedula cyanoptera*).

AVICULTURAL NOTES FOR THE PAST YEAR.

The past season with its cold spring and dull damp summer has not been very favourable to successful aviculture in outdoor exposed aviaries, and the fact that several of our members have been so successful in rearing rare birds speaks volumes for their skill.

For my part I have not been very successful, the number of young birds reared in my aviaries being considerably below the average. The following notes may however be of some slight interest.

The Smith's Partridge Pigeons were the first to commence nesting, but entirely unsuccessfully, as already recorded (Vol. V. p. 292).

On April 20th the hen Many-coloured Parrakeet, which has been with me for eight years, commenced to sit, hatching, in due course, two young birds, both of which however died in the nest. The male is a new bird, imported in 1906, the original male to the old hen having died early that year. He may not have sufficiently settled down to feed the young properly, as the old hen has never before failed to rear her brood. Or possibly the failure was attributable to the cold weather.

I reared so many Quails last year that I was hopelessly overrun with young birds at the end of the season, and I decided not to breed any pure-bred Quails this year, but to try and breed some hybrids. I therefore tried to cross the Harlequin (*C. delegorguei*) with the Australian (*C. pectoralis*), and Harlequin

with Rain Quail (*C. coromandelica*). The hen Pectoral laid two clutches of eggs but entirely refused to sit, although the eggs, or at any rate one egg, tested in an incubator, proved to be fertile.

In August, seeing that my attempts at hybridization had failed, I replaced a hen Harlequin in the aviary, and within a fortnight she had commenced to lay in a beautifully concealed spot in a clump of grass. On September 10th she brought off a brood of seven, three eggs containing dead chicks being left in the nest. All seven chicks have been successfully reared, and have turned out to be all cocks except one !

The little Olive Finches (*Phonipara lepida*), to my mind some of the most charming birds one can keep in a large outdoor aviary during the summer months, have reared no less than eight young birds. The first brood consisted of two young birds which unfortunately were left in the same aviary when the parents had gone to nest a second time.

The second brood resulted in three young birds, and immediately these left the nest the parents turned upon the two young birds of the first brood, and in a few days these were found dead, apparently worried to death by their parents. Profiting by experience, the young of the second brood were transferred to another aviary when they could take care of themselves, and these and a third brood safely arrived at maturity.

Two young *Turnix varia* were successfully reared by hand as already recorded (Vol. V. p. 303).

Two hen Bourke's Parrakeets, both paired to the same cock, nested in separate logs in the same aviary. One nest resulted in four young birds and the other in two, all of which were reared, though three died long after they had reached the age at which they could feed themselves. Damp weather does not agree with young Bourkes in an open aviary.

On July 23rd, two young Parrot-finches left the nest and were successfully reared ; the red markings on one of these being almost as extensive as in an adult, though of course much duller.

September 5th. One young Yellow-rumped Finch (*Munia flavipectus*) left the nest. This young bird was seen to feed itself on September 18th, but the parents continued to feed it for

some time. It was dull brown over the head and back, dull tawny on breast; white under tail-coverts, and black bill, the lower mandible lightish grey at the base.

Besides the foregoing the following young birds have been reared :—Five Brush Bronzewing Pigeons, six Diamond Doves, and six Japanese Greenfinches.

D. SETH-SMITH.

BRITISH BIRDS IN NEW ZEALAND.

A highly interesting and instructive paper has reached us from New Zealand, entitled "Our Feathered Immigrants," in which the author, Mr. James Drummond, gives a digest of a mass of evidence which he has collected for and against the various species of birds that have been introduced into that country.

A circular, with twenty-nine questions relating to the introduced birds was drawn up, and issued through the Department of Agriculture to agriculturists throughout the colony. It is unnecessary here to repeat all the questions that were asked, suffice it to state that they requested information as to whether any introduced birds were present in the district of each colonist who received the circular; whether such species had done good or harm; whether they had driven away the native birds or otherwise; if proved to be harmful, what steps had been taken to check their spread, and whether the introduction of other British birds could be undertaken advantageously. The pamphlet above mentioned is the result of this inquiry and is very interesting reading.

The native fauna of New Zealand is perhaps the most interesting of that of any part of the world, but it could not exist in the face of civilization. With the introduction of three pigs, liberated by Captain Cook in Queen Charlotte Sound in 1773, the war against the native birds may be said to have commenced. These multiplied exceedingly, and when the settlers began to arrive the pigs had become a nuisance. To make matters worse the settlers brought with them many domestic animals, more disastrous than Captain Cook's pigs, and a bitter struggle

between the new fauna and the old took place. The native fauna had "no chance against the shrewd vulgar, hard-headed, cunning, practical, greedy, and ferocious invaders, who were inured to hardship and had walked hand in hand with adversity through many generations. The incident was a specially dramatic one in respect to the avifauna. The native birds were driven completely away—not altogether, or even chiefly, by the new comers, but by influences that the latter had been taught by experience to combat. Sentiment, necessity, and utility played parts in connection with the acclimatization of birds, and it was necessity and utility that carried most weight."

With the disappearance of the native birds, a terrible plague of caterpillars visited the colony some forty years ago. Farmers suddenly discovered their crops completely eaten up by these pests.

"The numbers of the insects increased with what they fed upon, and they marched from field to field in grand procession, leaving behind them the abomination of desolation."

Thus we see that out of pure necessity the settlers turned their attention to the introduction of some birds that would be likely to destroy the insect plague, and very naturally they thought of those they had known in the Old Country, with the result that many of our commonest birds were introduced.

The House Sparrow comes first on the list. Five of these birds were introduced in 1876 and others subsequently; they multiplied to a prodigious extent, and the inhabited districts soon became stocked with them. Although they are acknowledged to destroy a certain number of insects when feeding young, the good thus done is far more than outbalanced by the harm these birds do in destroying the crops. "Of the hundreds of correspondents who have filled in the circular there are only six who raise their voice in the Sparrow's favour." However, in concluding the account of *Passer domesticus* the author remarks "Whatever the Sparrow may do in these times, however, there is no doubt that it did good service to the agriculturist and horticulturist of New Zealand in former days, when the insects were on the war-path and when the people were liable to be eaten out of house and home. A new generation has arisen, and only the Sparrow's faults are remembered."

The Blackbird is universally condemned by fruit-growers and "its name linked with that of the Sparrow."

The Skylark is found to pull up springing wheat and other seedlings, and is also condemned by the colonists.

The Song Thrush is considered to do more harm than good. Though one observer is quoted who speaks very highly of its usefulness in destroying worms, slugs and insects.

"The Greenfinch is described sweepingly as the farmer's greatest enemy when grain is ripening."

The Goldfinch has not aroused much enmity and some say that it does more good than harm. The Redpoll is generally considered harmless; but "the Yellowhammer is classed with the Sparrow in descriptions of the damage done to seed in newly sown bush-burns in the North Island."

"Praise of the little Hedge-Sparrow is almost unanimous," while "there is hardly any limit to the good words said of the Starling," for which bird numbers of farmers erect nesting-boxes. Some alarming stories are told, however, of Starlings having taken to eating fruit; a habit that will not surprise those who know the bird in the Old Country.

One of the questions asked in the circular was, "Generally speaking, have the introduced birds done more good than harm, or more harm than good? The following replies are typical of the majority of those received: "As with most aliens, it would be better if they had stayed at home"; "A terrible mistake"; "For Goodness' sake don't make it worse by importing more of them," and so on. "The consensus of opinion," the author remarks "is expressed in too clear, concise, and emphatic a manner to leave any shadow of doubt as to the strong antagonism felt towards English birds.

"Many farmers, however, modify their condemnation by expressing an opinion that if the birds could be kept in check they would be converted from enemies into friends. I cannot help thinking that this is the proper attitude to adopt. The birds are far from being altogether bad. A forgetful generation may have a bad memory, but great services given in the past must not be ignored when the birds are on their trial."

It has often been stated that the introduced birds have

driven away the indigenous species, but this does not seem to be the case according to the result of the present inquiry, which has "failed to bring out any evidence of a determined or concerted plan on the part of the introduced birds to attack and drive away the native birds. Sparrows and other introduced birds have been seen attacking natives, but Tuis and several other species of native birds have attacked introduced birds on occasions with great ferocity."

NOTICES OF NEW BOOKS, ETC.

WILD LIFE IN AUSTRALIA.*

Those who are interested in the fauna of Australia will find an abundant supply of interesting matter in Mr. Le Souëf's new book. The author deals with his subject in a manner that shows him to be a most observant and experienced naturalist of a type that is all too rare now-a-days. "Wild Life in Australia" is no compilation from the works of others, but a careful record of the author's own observations over a long period, of the wild life of a most interesting country.

Of the bird-life of Australia we learn much from Mr. Le Souëf's book, and many of the birds dealt with are known to us here as aviary inmates, as they are also to Mr. Le Souëf who, as Director of the Melbourne Zoological Gardens, knows most of the Australian creatures in captivity as well as wild.

It is difficult to say which chapter is the most interesting, every page is delightful, but perhaps the author's account of his visit with a companion to Albatross Island, one of the Hunter Group, off Tasmania, is especially worth mention. The island is composed entirely of rock, overgrown in parts with pig-faced weed or mesembryanthemum, wild geranium and tussock grass. While gazing from the top of the island the explorers suddenly caught sight of a number of large birds sitting on clear ground near the edge of the cliff, which proved to be *Diomedea canta*, the Shy Albatross of Gould. Remembering that Gould had said that

* *Wild Life in Australia*, by W. H. DUDLEY Le SOUËF, C.M.Z.S., M.B.O.U., &c. Director Zoological Gardens, Melbourne; Whitcombe and Tombs, Limited, Melbourne and London. Price 7/6 net.

these birds were very difficult to approach, "we went towards them very carefully, keeping ourselves hidden in the tussocky grass and frequently crawling along to avoid being seen. When sufficiently close we took our first photo., and we did so by slowly raising the camera to the level of the grass, all set, and then letting our shutter go from our place of concealment. We then remembered that the Albatross could not well rise from the level ground, so approaching closer with less care took another snap shot, and as the birds still did not rise, we boldly walked up to one, and found that they practically took no notice of us." Some extremely good photographs are given, illustrating the Albatross colony and the birds sitting on their nests, feeding their young and so forth.

One other extract, perhaps of more interest to aviculturists, must suffice. In the chapter headed "Mallacoota Inlet," the author writes : " In one of the gullies we heard a Lyre Bird on its slight mound, mimicking the various birds of the bush, even the Laughing Jackass, the Grey Crow Shrike, Gang-gang Cockatoo, &c. But what struck us as most curious was its imitating the whining and yelping of a puppy ; and we afterwards heard that some miners who were camped near by, used to leave a puppy fastened up at their tent while they were away. We also heard the bird uttering a note something like the sound produced by a cross-cut saw, and as one had worked in the neighbourhood, that is probably what it was ; it only shows what wonderful power of mimickry these interesting birds have.

" We frequently heard the Satin Bower Birds in the dense scrub and were fortunate in finding one of their bowers built in a pretty situation and surrounded with ferns. These birds when in their greenish costume are far from shy, but when the males don their beautiful dark blue satin livery in their seventh year, they at once seem to realise that they are conspicuous and always keep as much out of sight as possible ; but for all that they evidently soon fall a prey to the watchful Hawk, as it is a rare thing to see more than one blue male in a flock of these birds. It is curious watching their antics as they are playing round their bower, hopping about with mincing steps and drooping their wings at the same time, picking up sticks or shells and dropping them again in front of

one another, and at the same time uttering a low running note. They are also very clever at mimicking other birds."

Mr. Le Souëf is a skilful photographer, and his photos., with a few by Mr. Mattingley and others, are liberally dispersed throughout the pages of this book.

GILBERT WHITE, OF SELBORNE.

The Hastings and St. Leonards' Natural History Society numbers amongst its members some of our best ornithologists, who from time to time deliver lectures to the members on various branches of their favourite science. One of the most important of these was delivered on June 4th last, by Mr. W. H. Mullins, M.A., under the title that heads this notice, and is now published by Messrs. Witherby, at the moderate price of 2/6. An interesting account of the life and work of the famous naturalist is given and is well deserving of perusal by those who follow in his footsteps. It is illustrated by several excellent photographic plates.

CORRESPONDENCE, NOTES, ETC.

HYBRID *NEOCHMIA PHAETON* × *BATHILDA RUFICAUDA*.

SIR,—It may be of interest to record the fact that in my aviary in Italy, on the Lake of Como, a male Australian Crimson Finch, *Neochmia phaelon*, has taken to himself a female Star Finch, *Bathilda ruficauda*, to wife. Unfortunately the two young ones, which were the result of the match, were found dead whilst still in a featherless condition, thrown out of the nest.

I still hope that some young may be reared in the future, for such a hybrid would undoubtedly be most interesting. The parent birds are building again, but it is rather late in the year, and I shall not encourage them.

HUBERT D. ASTLEY.

THE TRUMPETER BIRD.

SIR,—In the very interesting article on the Trumpeter Bird, by Mrs. Gregory, in the November issue of the *Avicultural Magazine*, she gives "Agami" as the native name of this bird.

May I beg to suggest that this is the native name of the Agami Heron (*Ardea agami*)? The only native name of the Trumpeter Bird which I remember to have heard in British Guiana was "Warracaba."

E. W. HARPER.

AVADAVATS, BLUE-BEARDED JAYS, BULBULS.

Mr. TESCHERMAKER writes:—

"I see you mention the breeding of the Common Avadavat in "Stray Notes," but surely this is not exceptional is it? I bred two young of this species in 1904, and two more in 1905.

"I should be obliged if you could tell me if the Blue-bearded Jay of South America has been bred, and also if any Bulbul has been bred except *P. hemorrhous* which I believe, the Zoo. bred some time since.

[With regard to the Avadavats, it may not be very exceptional for them to breed in this country, but certainly it does not strike us as a particularly common occurrence. Unfortunately our members are so shy of recording such events, many apparently thinking that it is not worth recording breeding results unless the species bred has done so for the first time in captivity. We wish all of our members would record the nesting in their aviaries, of even quite common birds.

The Blue-bearded Jay has never, we believe, bred in captivity, and the same may be said of the Bulbuls with the exception of *Pycnonotus hemorrhous* which bred at the London Zoological Gardens in September 1900, though whether the young were reared to maturity or not we do not know.—ED.]

OLD BOOKS WITH NEW NAMES.

Certain publishers appear to be rather fond of issuing new editions of old works with entirely different titles to those by which such books have always been known, a practice which is calculated to mislead the public and bring blame upon the author, though he may be entirely ignorant of the publishers intention until after the book is in the hands of the public.

Many of our members possess Dr. A. G. Butler's *Foreign Finches in Captivity*, and if these should chance to hear of an apparently new work entitled *Beautiful Foreign Finches* they may be somewhat disappointed to discover that this is merely a cheap edition of the older work which, though excellent in itself, is somewhat out-of-date now.

We understand from the Author of the above work that he knew nothing of this change of title until a correspondent informed him of it.

Again, a new edition with coloured plates, has appeared of "British Birds with their nests and Eggs" under the title of "Birds of Great Britain and Ireland." In this case, however, a change of title was rendered necessary as in most of the new plates no nest has been figured. We

understand from the Author that he wrote an Introduction, in which he fully explained the necessity for the change of name, but although this was printed, corrected and approved, it has not been published in Vol. I., which therefore appears as an entirely new work, though, as a matter of fact, only the plates are new.

SPECIAL NOTICE.

The Editor is leaving England early in December on a mission to Australia for the Zoological Society of London, and will not return until next May or June. In the meantime Dr. A. G. Butler has most kindly consented to act as Editor of the *Avicultural Magazine*, and all editorial matter should be addressed to him at 124, Beckenham Road, Beckenham, Kent.

POST MORTEM EXAMINATIONS.

RULES.

Each bird must be forwarded, as soon after death as possible, carefully packed and postage paid, direct to Mr. ARTHUR GILL, Lauherne, Bexley Heath, Kent, and must be accompanied by a letter containing the fullest particulars of the case, and a fee of 1/- for each bird. If a reply by post is required a fee of 2/6 must be enclosed. Domestic poultry, pigeons, and Canaries can only be reported on by post.

PINTAIL, NONPAREIL. (Miss Gladstone.) The bird died of concussion of the brain, caused by direct injury to the top of skull.

RED ROSELLA. (Mrs. Lee.) The bird died of syncope. It was extremely fat and the heart was loaded with fat. I think the sunflower seed too fattening if given in quantity.

SHAMA. (Mr. Norwood.) The bird died of inflammation of the bowels. He was having a very hard moult.

Answered by Post :

BARONESS LE CLEMENT DE TANITEGNIKS.

Rev. H. D. ASTLEY.

III.

NOTICES TO MEMBERS—(Continued from page ii. of cover).

NEW MEMBERS.

Herr AUGUST FOCKELMANN; Tierpark, Gross-Borstel, Hamburg.

Mr. THOMAS CURTIS; 67, Frith Street, Soho Square, W.

Mr. ROBERT GREEN; Covent Garden, London.

CANDIDATES FOR ELECTION.

Miss McWILLIAMS; 5, Den Crescent, Teignmouth.

Proposed by The Hon. Canon DUTTON.

Mrs. GUY SEBRIGHT; Clare House, Horsforth.

Proposed by Mr. A. SIMPSON.

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Proposed by The hon. Business Secretary.

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Advertiser, due home next March, will endeavour to bring Indian birds if suitable offers are received in time to collect them. See advt. in October number.

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